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MONEY AND BANKING IN THE
REPUBLIC OF THE SUDAN

by

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A THESIS

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The undersigned certify that they have read, and
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ABSTRACT

Many less developed countries place great emphasis on monetary institutions as vehicles for accelerating the rate of growth. This thesis examines the monetary system of the Republic of the Sudan and analyzes the ways in which the commercial banks or the central bank can be used to promote growth. Some shortcomings of the present system are examined and an attempt is made to formulate policies which might correct those deficiencies.

The thesis concludes that the banking system of the Sudan is adequate for the needs of the country, although it is pointed out that without some changes at the policy level the full potential of the commercial banks for promoting growth will be lost. It is further noted that many problems of the Sudan are not susceptible to monetary solutions.

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CHAPTER I

THE SUDANESE ECONOMY

The Republic of the Sudan is a large country of almost one million square miles situated in the northeast part of Africa. It is bounded on the north by Egypt, on the east by the Red Sea and Ethiopia, on the South by Kenya, Uganda and the Republic of the Congo, and on the west by Chad, the Central African Republic and Libya. The main geographical features of the Sudan are the Sahara desert in the northwest corner and the Nile river which runs from south to north bisecting the country. The Nile, with its tributaries, has been both a unifying force to the Sudan and a source of livelihood to its people by providing transportation and water for crops. While the latter function is more important than ever, railroads have reduced the importance of the Nile as a means of transportation. The single track railway between the capital, Khartoum, and Port Sudan on the Red Sea is particularly important since it carries almost all the country's exports and imports.

The climate of the Sudan is tropical throughout although the amount of rainfall varies from almost none in the northern desert to an equatorial type of climate in the extreme south. The soils of the Sudan also vary in structure and fertility, but generally speaking the country has a good supply of land suitable for agriculture. It is estimated that

two thirds of the area could be developed for agriculture and grazing purposes.¹

With a total population of thirteen million² and a population density of five persons per square kilometer the Sudan is relatively lightly populated. The population is very unevenly spread over the country, density ranging from two persons per square kilometer in Northern province to twenty-four per square kilometer in Khartoum province.³ The total population can be roughly divided into two groups: Arabs who inhabit the northern part of the country and Negroes who occupy the three southern provinces.⁴ The racial distinction is not great because the "Arabs are a mixture of Arabic, Negroid and Mediterranean races and Negroid features are widespread among the Arab elements."⁵ This group, however, uses Arabic as either its first or second language and is Moslem by religion. The Southerners, on the other hand, use English as a second language (various African dialects make up their first language) and are either Christian or Pagan in religion.

¹United States, Department of Commerce, "Basic Data on the Economy of the Sudan," Overseas Business Reports, (OBR-63-166, December, 1963), p. 4.

²Population figures are based on a 1956 census count of 10.3 million compounded at a rate of growth of 2.8 per cent per annum. Erin E. Jucker-Fleetwood, Economic and Financial Aspects of the Republic of the Sudan (Basle Centre Publication Series A, No. 35) suggests that the actual rate of population growth is 3.3 per cent.

³U.S., Department of Commerce, op. cit., p. 2.

⁴The three southern provinces are Upper Nile, Bahr El Ghazal and Equatoria. The six northern provinces are Darfur, Kordofan, Blue Nile, Khartoum, Northern, and Kassala.

⁵K. M. Barbour, The Republic of the Sudan (London: University of London Press, 1961), pp. 74-75.

A basic animosity between the two groups stems from the fact that in earlier days the Arabs enslaved the Negroes and strains arising from this relationship are still evident today.¹

The economy of the Sudan is characterized by low per capita output and a large proportion of output occurring in the traditional sector. Other major characteristics are the dominance of primary activities, the dependence on a single export crop (cotton), reliance on imports of manufactured goods of all kinds, and a deficiency of technical skills and organization.² Table 1 shows total gross domestic product of both the traditional and modern sectors and per capita output for the years 1955 to 1963. Although no official definition is given, traditional output probably represents that part of the nation's output produced with little or no capital equipment and destined primarily for consumption by the producing households.³

¹P.F.M. McLoughlin, "Economic Development and the Heritage of Slavery in the Republic of the Sudan," Africa, XXXII (October, 1962), 355-91.

²Sudan, Ministry of Finance and Economics, Research and Statistical Section, Economic Branch, Economic Survey 1962, pp. 73-74.

³This, at any rate is what is generally meant by the term "traditional" or "subsistence" sector. See United Nations, Department of Economic Affairs, Structure and Growth of Selected African Economies (New York, 1958).

TABLE I

GROSS DOMESTIC PRODUCT AT FACTOR COST, CURRENT PRICES
FOR FISCAL YEARS 1955-56 TO 1962-63^a

	Year Ending June 30							
	1956	1957	1958	1959	1960	1961	1962	1963
	Millions of Sudanese Pounds ^b							
Gross Domestic Product								
a. traditional	160.3	164.4	170.0	174.2	180.9	186.2	187.4	193.3
b. modern	123.9	148.2	137.9	144.3	165.2	167.6	211.3	211.3
Total	284.2	312.6	307.9	318.5	346.1	353.8	398.6	404.6
	Sudanese Pounds							
Per Capita G. D. P.	27.4	29.3	28.1	28.3	29.7	29.7	32.5	32.1

^aSource: Sudan, Ministry of Finance and Economics, Research and Statistical Sector, Economics Branch, Economic Survey 1963.

^bThe Sudanese pound is equal to 2.872 U.S. dollars.

Table 2 gives a breakdown of gross domestic product by economic sector for the fiscal year 1962-63, as well as showing the percentage increase in output by sector from 1955-56 to 1962-63. Some very substantial increases were recorded in a number of sectors, particularly manufacturing, but agriculture, livestock, forestry and fishing still make up fifty-five per cent of gross domestic product. Modest reserves of various minerals have been found in the Sudan but as yet mining is not economically significant. No oil, coal, or gas has been discovered.

Output in the traditional sector of the Sudan has been increasing steadily at a rate of approximately 2.8 per cent, the rate of increase in population. Output in the modern sector, while increasing at an average of 9 per cent per year, fluctuated considerably, the annual change since 1955-56

Table 2

Gross Domestic Product By Economic Sector
For the Fiscal Year 1962-63^a

Economic Sector	Output 1962-63 (£S. millions)	Per cent of total G.D.P.	Increase from 1955-56 per cent
agriculture	140.230	34.6	33
livestock	40.054	9.9	24
forestry	36.550	9.2	29
fishing	8.027	1.9	24
transport	64.068	15.8	70
minerals	.278	-	24
manufacturing	7.590	1.8	175
public utilities	2.221	0.5	114
craft industries	12.086	2.9	24
construction	27.354	6.8	69
banks	3.273	0.8	142
non-government education	1.955	0.5	202
domestic service	1.860	0.4	24
miscellaneous service	18.144	4.5	20
government	32.200	7.9	87
ownership of buildings	10.751	2.6	32
G.D.P.	404.641	100	42

^aSource: Sudan, Economic Survey 1963, p. 71.

ranging from 19 per cent to -7 per cent. These variations can be traced to changes in the yield and price of cotton which is the largest single industry in the Sudan and which is produced mainly in the modern sector.

Cotton became important to the Sudan economy in 1925 when construction of the Gezira scheme was completed. Initially this project involved the irrigation of 300,000 feddans¹ of land for the growing of cotton. Later additions brought the irrigated area in the Gezira up to one million feddans by 1956, while an additional 750,000 feddans elsewhere in the

¹One feddans equals 1.038 acres.

country were devoted to growing cotton.¹

The Gezira scheme was organized as a partnership involving the government of the Sudan, a private company called the Sudan Plantations Syndicate, and tenants on the land. The government supplied the dam on the Blue Nile and the major irrigation canals. The Syndicate supplied the minor ditches, working capital and machinery, and organization, supervision and control of the cotton planting. The tenants were to supply the labor. The cotton crop was divided among the government, the tenants and the company in the ratio 40:40:20. In addition to their share of the cotton crop the tenants were allowed to grow some food crops which they were permitted to keep for themselves.²

While remaining basically the same, some details of the arrangement have been changed. In 1950 the role of the Syndicate was taken over by a government agency, the Sudan Gezira Board, which carries out all the functions formerly performed by the private company. A second change introduced more recently was a reduction in the size of tenancies from forty to twenty feddans. This move should double the number of tenancies and at the same time reduce the total amount of labour required by the scheme, since tenants on the smaller holdings can be expected to

¹K.M. Barbour, op. cit., p. 269.

²A very complete description of the Gezira scheme is contained in J.D.N. Versluys, "The Gezira Scheme in the Sudan and the Russian Kolkhoz: A Comparison of Two Experiments," Economic Development and Cultural Change, II (April, June and October, 1963), 32-59, 120-35 and 216-39.

do most of the work themselves, rather than merely supervising hired labor as was the custom with the larger holdings.¹

While cotton will, for some time to come, continue to be the major product and export of the Sudan, a major goal of the country's current ten year plan is a diversification of production and the reduction of dependence on this single crop.² To achieve this objective the plan envisages gross investment over the period of £S. 565 million. This represents a substantial amount of investment for such a small economy. In fact investment in the Sudan has risen from less than 8 per cent of G.D.P. in the fiscal year 1955-56 to more than 14 per cent of G.D.P. in 1962-63.³ Table 3 shows how total investment under the plan will be distributed among the various economic sectors.

The most outstanding feature of the ten year investment program is the large amount (27 per cent of the total) to be spent on social services. In contrast, an investment programme proposed by a World Bank mission to Morroco had only 4 per cent of total expenditure devoted to social services.⁴

¹McLoughlin, op. cit., p. 378, says "Twice as many people are needed to produce the same bale of cotton or ton of grain as were required twenty years ago." He attributes this to the tendency of tenants to employ hired labor rather than doing the work themselves.

² Sudan, Economic Survey 1962, Chapter VIII and especially p. 74.

³ Compare Appendix I, Gross Fixed Investment 1955-56 to 1962-63 with G.D.P. for the same period in Table 1.

⁴H. David Davis, "Developing Morocco's Economy," Finance and Development, III (March, 1966), 17.

Table 3

Total Gross Fixed Investment 1961-62 To 1970-71
Roughly Classified According To Broad
Economic Sectors And To Sponsors^a

Sector				Per cent of
	Private	Public	Total	Total
	£S. millions			
Agriculture	30.0	90.1	120.1	21
Industry	65.0	41.9	106.9	19
Transport	32.0	63.0	95.0	17
Social Services	60.0	90.0	150.0	27
Total expansion investment	187.0	285.0	472.0	84
Replacement investment	41.4	52.0	93.4	16
Total gross fixed investment	228.4	337.0	565.4	100

^aSource: Sudan, Economic Survey 1962, p. 76.

Almost 60 per cent of the total spending under the plan is to take place in the public sector. Two-thirds of this was to be financed by the savings of the public sector and the balance was to come from foreign loans and grants. The planners did not envision any deficit financing.¹ In order for the public sector to realize the projected savings over the plan period, government spending on the current budget was to increase at no more than 5 per cent per annum.² While actual expenditures did not increase at a much faster rate than this, the Central Government

¹Bank of Sudan, Annual Report, III (1962), 6.

²Ibid., p. 8.

nevertheless has suffered an over-all deficit in every year since the development plan began.¹ This deficit has been larger than the inflow of foreign funds and has been financed by drawing upon Central Government deposits with the Bank of Sudan which had been built up in previous years.

If this expansionary activity on the part of the government had no serious inflationary effects in the Sudan it can probably be attributed to the fact that foreign exchange reserves have fallen every year since the inception of the plan.² However, by the end of 1965 foreign exchange reserves had been reduced to £S. 20.8 million³ and it is doubtful that they can be allowed to fall much more. Thus the Sudan is now faced with the problem of financing the development plan from current saving. If the country is to make the best possible use of all available resources, without creating excessive inflationary pressures, proper policies, both monetary and fiscal, must be used.

The basic problem will be that of mobilising resources for investment and will fall mainly in the realm of fiscal policy. While appropriate monetary policies may have a marginal effect on increasing savings, any large increase in savings will result only from increases in income. It may, however, be possible to raise the saving of the public

¹ Bank of Sudan, Annual Report, I-VI (1960-65), Chapter XI.

² Ibid, Chapter III.

³ Ibid, 1965, p. 23.

sector through appropriate fiscal policies. These would include both measures to reduce expenditure, either relatively or absolutely, and measures to increase revenue.

The latter will not be easy in the Sudan. Most of the government's revenue comes from indirect taxes and participation in agricultural schemes.¹ Raising indirect taxes may very well have a strong disincentive effect on people in the subsistence sector who are considering entry into the modern sector, whether they are planning to work for wages or to raise cash crops. On the other hand, direct taxation also offers bleak prospects at the present time.² It is true that the government did try to extend the scope of direct taxation towards the end of 1963 by raising the rate of business profits tax and by introducing a personal income tax. But since tax exemptions are given to new firms, and since the personal income tax applies only to incomes over £S. 1,350 per year, the results have not been dramatic.

Nevertheless it seems absolutely necessary that the Sudan should

¹See Appendix II, Government Revenue According to Source 1961-62 and 1962-63.

²See Peter F. M. McLoughlin, "Income Distribution and Direct Taxation, An Administrative Problem in Low-Output African Nations: A Case Study of the Sudan," Economia Internazionale, XVI (August, 1963), 529-37; and Z. M. Kubinski, "Indirect and Direct Taxation in an Export Economy: A Case Study of the Republic of the Sudan," Public Finance, XIII (October - December, 1959), 316-43. Both maintain that indirect taxation must predominate in the Sudan for some time to come.

have a progressive system of direct taxation applied at a level of income low enough to be effective. When applied it need not be very remunerative. Rather it will be used to siphon off an ever increasing proportion of rising incomes. If the rise in personal incomes is not matched by an equal rise in output, the tax will be an effective brake on inflation. On the other hand, if there is a rise in real incomes, the tax will make more resources available for investment even as consumption increases.¹ These resources can either be used by the government or can be made available to the private sector through the commercial banking system or the development banks.

¹Antonin Basch, Financing Economic Development (New York: MacMillan, 1964) claims that in underdeveloped countries increases in government revenue have been matched by increased expenditures with no resultant increase in Government saving. This is misleading. What Basch should do is compare the Government's budgetary position after the increase in taxes with what it would have been had taxes not been raised.

CHAPTER II

THE DEVELOPMENT OF BANKING

In an economy where everyone produces only for his own consumption and no exchanges take place there is no need for money. But even in very primitive economies, largely devoted to subsistence production, some exchanges of goods and services are likely to occur. To facilitate these transactions when one party has no immediate need for what the other party has to offer, almost all primitive economies use money of some sort. Some of the early types of money used in the Sudan were sticks of salt, strips of homespun cotton cloth and sheep or goats for larger transactions.¹

Coins were probably first introduced into the Sudan by Arab traders sometime in the seventeenth or eighteenth century.² The use of coins, while limited at first, must have increased with the growth in trade which followed the Egyptian conquest in 1821. With the establishment of the Anglo-Egyptian Condominium government in 1898 the Egyptian monetary system was introduced, and from 1916 to 1956 the currency in use in the

¹Reginald Davies, The Camel's Back; Service in the Rural Sudan (London: J. Murray, 1957), p. 159.

²Bank of Sudan, "Some Historical Notes on the Use of Currency in the Sudan", Economic and Financial Bulletin (October/December, 1960), pp. 19-26.

the Sudan consisted of Bank of Egypt banknotes and British and Egyptian coins.

The use of modern types of money spread slowly throughout the Sudan. As late as 1922, Davies witnessed sticks of salt being used to conduct transactions in the market at El Geneina.¹ Jucker-Fleetwood says that even today "in the Southern part of the country, which is still very isolated and almost untouched, the circulation of money outside the towns must be very slight."²

The use of the Egyptian monetary system had some disadvantages for the Sudan. The external value of the currency was tied to the external value of Egyptian currency, forcing the Sudan to devalue if Egypt did and preventing the Sudan from devaluing unless Egypt did. There was no guarantee that currency held by the Sudan could be exchanged for foreign currencies if Egypt depleted her reserves of foreign exchange. Nor could an effective monetary policy, independent of that in force in Egypt, be introduced since it could be offset by flows of currency between the two countries.

For these reasons a currency board was set up in 1957 to replace

¹Davies, op. cit., p. 165.

²Erin E. Jucker-Fleetwood, Money and Finance in Africa (New York: Frederick A. Praeger, 1964), p. 194 (hereafter cited as Money).

all currency in the country with Sudanese currency consisting of the Sudanese pound (£S.) valued at 1.025 pounds sterling. The foreign currency withdrawn from circulation (amounting to £S. 25.96 million) was repatriated and the government of the Sudan provided the Currency Board with a cover for the new domestic issue.¹ This cover consisted of Sudan Government non-transferable treasury bills to the value of £S. 12.98 million, the balance of the cover being gold, sterling balances or securities issued or guaranteed by the British government. By law any additional currency issued had to be covered in full by the above mentioned foreign assets.²

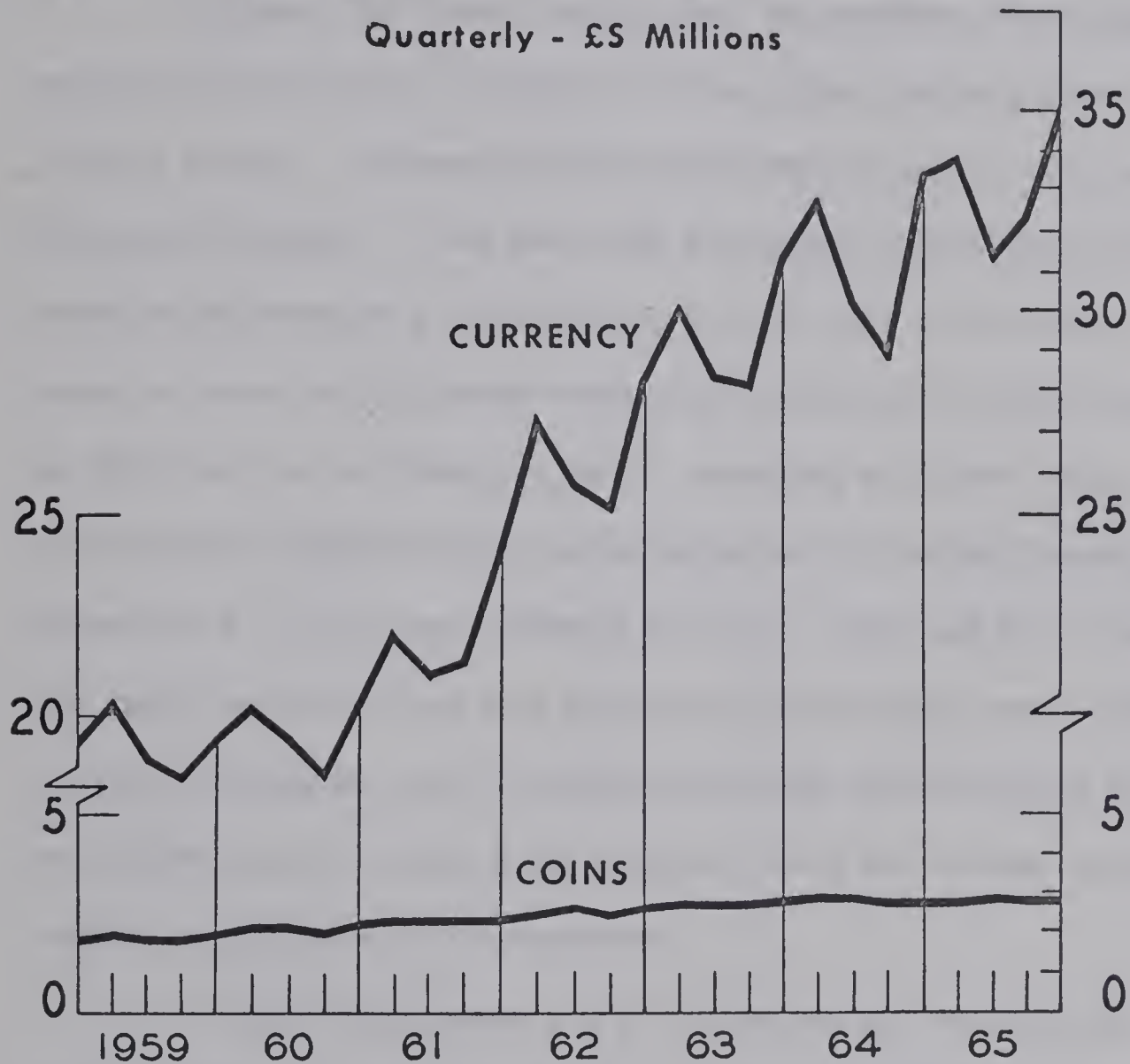
Figure 1 shows the increase in currency and coins in the hands of the public in the Sudan from the end of 1958 to the end of 1965. A trend line drawn through each set of points would indicate that currency in the hands of the public has been increasing by 14 per cent annually over the period while the public's holdings of coins has increased by about 8 per cent per year.

An increase in the currency in circulation could be attributed to a number of factors. These are: (1) An increase in output in the economy, (2) an increase in prices, (3) growth of the money using population, and (4) deepening of monetization in marginal users. To some extent each of

¹ Details of the changeover in currency are contained in Salah F. Jawhari, "The Recent Trend in the Development of Banking in Sudan," Middle East Economic Papers, X (1963), 75-94.

² Sudan, Currency Act 1956.

Figure 1
COINS AND CURRENCY HELD BY THE PUBLIC
Quarterly - £S Millions



Source: Bank of Sudan, Annual Reports, 1960-65

these played a part in the Sudan, although it would be hard to isolate the influence of each factor.¹ It would also be hard to find the cause and effect relationship between any of the above factors and a change in the

¹While it is easy to show that prices or output have increased it would be difficult to assess exactly how much extra money was needed because of these factors.

currency held. For example, an increase in prices might be the result of increased holdings of currency; on the other hand a rise in prices might necessitate increased holdings of currency.

Mahhouk and Drees suggest that "an extension of the money-using sectors of the economy is indicated by the higher rate of growth of the modern sectors, compared with the traditional sectors, in the national incomes estimates."¹ But one would expect that an expansion of this sort would be indicated by a more rapid growth of coins in circulation. New users of money should prefer coins if only because the type of transactions in which they are involved are small, requiring only small sums. The smallest unit of paper money in the Sudan has a value of 25 piasters (100 piasters = £S. 1) or approximately 75 cents, a fair sum in a country where per capita income is less than one hundred dollars per year. Another reason for marginal users of money preferring coins is that in the southern part of the country, where most marginal users are located, notes are subject to damage by rot or termites.²

In spite of the recent and as yet incomplete monetization of the Sudan, banking is not as new to the country as might be thought. The National Bank of Egypt registered in the Sudan in 1901, while Barclays Bank D.C.O.,

¹A. Mahhouk and F. Drees, "Domestic Policies and Payments Problems of the Sudan 1947-1962, "International Monetary Fund Staff Papers, XI (March, 1964), 172.

²Jucker-Fleetwood, Money, op. cit., p. 201.

a British bank, opened a branch in Khartoum in 1913.¹ These were the sole banks operating in the country until 1949. Presumably most of their work involved government accounts and handling deposits and loans for the few Egyptian and European individuals and firms in the Sudan. From 1948 to 1958 more than twice as many banks began operating and opened twice as many branches as in the previous forty-seven years. Table 4 shows the increase in the banking network over the years.

Table 4

The Banking Network In The Sudan^a

Bank	Date of Registration	Number of Branches		
		1948	1958	1965
National Bank of Egypt ^b	1901	7	7	..
Barclays Bank D.C.O.	1913	4	17	22 ^e
Ottoman Bank	1949	..	5	10
Credit Lyonnais ^b	1953	..	5	..
Bank Misr	1953	..	4	8
Arab Bank	1956	..	1	3
Commercial Bank of Ethiopia ^c	1958	..	1	1
Bank of Sudan ^d	1960	..	..	10
Sudan Commercial Bank	1960	..	..	1
El Nilein Bank	1946	..	..	3

^aSource: A. Brimmer, "Banking and Finance in the Sudan, " South African Journal of Economics, XXVIII (March, 1960) 25; Sudan, Sudan Almanac 1958, pp. 121-22; Sudan, Trade Directory of the Republic of the Sudan, 1964 and 1965.

^bNo longer operating in the Sudan. ^cFormerly State Bank of Ethiopia.

^dCentral Bank. ^eIncluding four agencies.

¹A. Brimmer, "Banking and Finance in the Sudan, " South African Journal of Economics, XXVIII (March, 1960), 25.

The National Bank of Egypt never developed a great deal of business with the general public, government deposits forming the largest part of its liabilities and loans to other banks forming the largest part of its advances.¹ Most of this business would have been taken over by the central bank, the Bank of Sudan, when it commenced operation in 1960. The National Bank of Egypt, therefore, disposed of all its assets and liabilities to the Bank of Sudan and ceased operation in the country. Although the National Bank of Egypt had performed many of the functions of a central bank in the Sudan, it could not implement a forceful monetary policy since its control over the money supply was limited. It did not have the power to issue notes.

Credit Lyonnais also ceased to operate in the Sudan, having transferred its banking activities to a Sudanese company, El Nilein Bank, in return for forty per cent of the shares of the latter.² The remaining capital of the new bank was taken up by the Bank of Sudan.³ The Bank of Sudan is also involved directly in commercial banking to a limited extent. Two of its ten branches are located in areas (Wau and Malakal) where there are no commercial bank branches. As a service, these two branches of the central bank are empowered to accept deposits from private individuals and firms, although they do not make loans or advances.⁴

¹ Brimmer, op. cit., p. 27, prints a balance sheet of the NBE Khartoum showing total deposits of £S. 12.96 million of which £S. 11.6 million belong to the Central Government, while at the same time advances are £S. 0.248 million compared to loans to other banks of £S. 5.1 million.

² Bank of Sudan, Annual Report, V (1964), 42.

³ Ibid.

⁴ Ibid., p. 31.

The Sudan Commercial Bank was the first domestically owned bank in the Sudan. Its capital of £S. 500,000 was over-subscribed with nineteen thousand shareholders.¹ The formation of this bank, as with other domestic commercial banks in Africa, was due to a rise in nationalism and the release of pent up feelings against expatriate banks which were felt to discriminate against indigenous borrowers.² Sizeable semi-government deposits were transferred from the Bank of Sudan to the Sudan Commercial Bank and other unspecified help was given by the central bank.³ While it is easy to understand the desire on the part of the Sudanese officials to get the first domestic bank off to a good start, any assistance must be handled with care. Brown points out that a policy in Nigeria of government assistance to indigenous banks not only did not help the banks concerned but actually harmed them.⁴ Furthermore, there seems to be good reason for such a policy to be handled directly by the government rather than the central

¹Jucker-Fleetwood, Money, op. cit., p. 130.

²Edward and Mildred Marcus, Investment and Development Possibilities in Tropical Africa (New York: Bookman Associates, 1960), claim that discrimination occurred only because indigenous borrowers did not meet the borrowing standards of the expatriate banks. It seems fairer to argue that the banks failed in not adjusting their operations to suit the local conditions.

³Bank of Sudan, Annual Report, I (1960), 30.

⁴C.V. Brown, Government and Banking in Western Nigeria (Ibadan: Oxford University Press, 1964).

bank, since the latter must appear impartial if its policies are to meet with cooperation from the commercial banks. The same argument could also be used to question the wisdom of the Bank of Sudan's financial participation in El Nilein Bank.

In addition to the banks listed in Table 4, two other institutions which hold an anomalous position in the banking system must be mentioned. They are the Agricultural Bank of Sudan and the Industrial Bank of Sudan. The former commenced operation in 1959 and as of mid-1964 had 10 branches; the latter commenced operation in 1962.¹ The outstanding capital of both these institutions has been subscribed by the Government and the Bank of Sudan. Neither institution has recieved a significant amount of funds, whether in the form of deposits or loans, from the private sector and in this sense they are distinct from the rest of the banking system.² Both institutions do make loans to the private sector but in this area too they do not seem to be in competition with the commercial banks.³ Because of these differences in method of operation, it was not considered correct to classify the Industrial and Agricultural banks with the rest of the banking system.

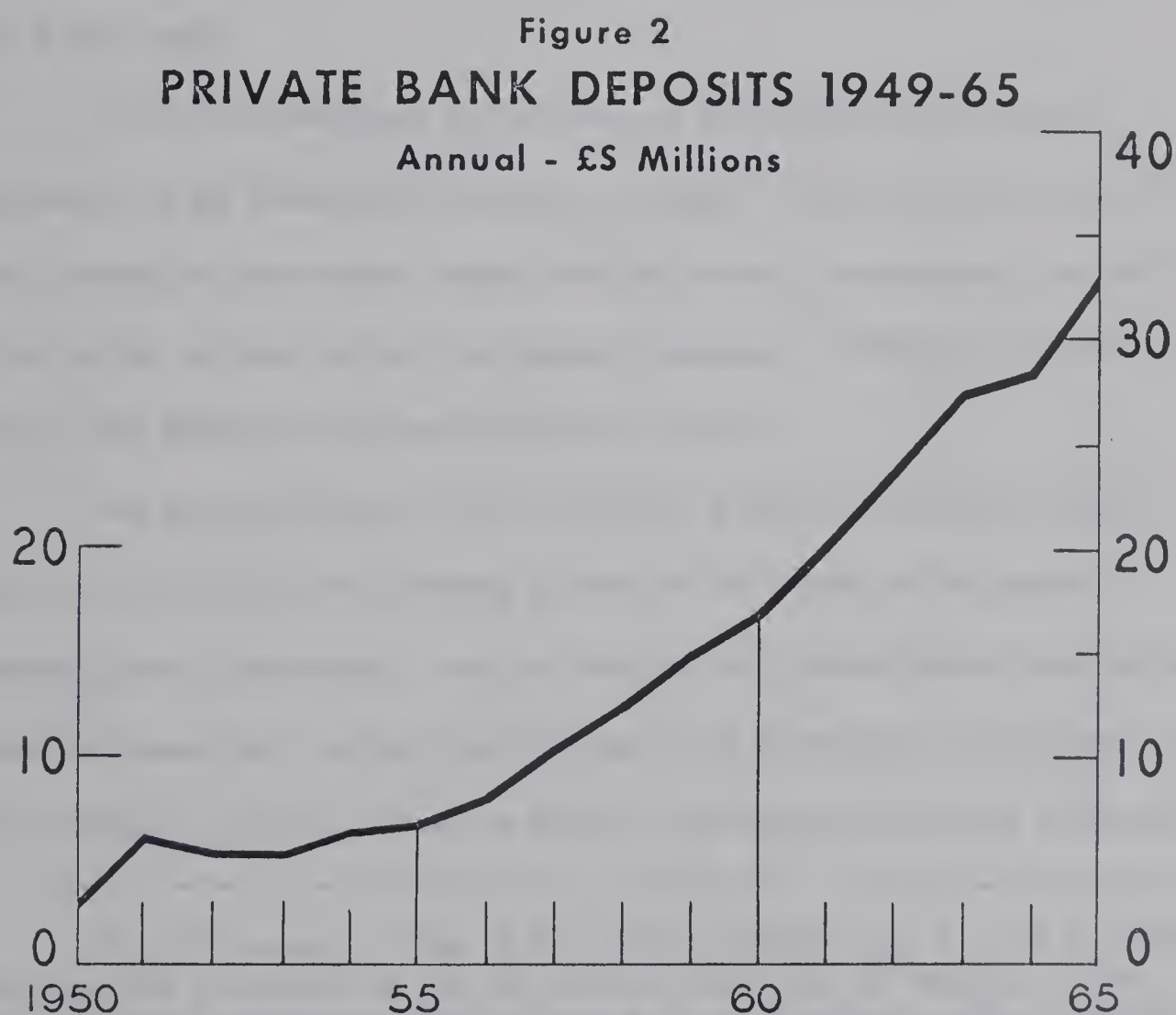
¹J.D. Nyhart and Edmond F. Janssens, A Global Directory of Development Finance Institutions in Developing Countries (Paris: Development Centre of the OECD, 1967), pp. 362-65.

²Ibid. The balance sheet of the Agricultural Bank as of the end of June, 1964 showed private domestic deposits of £S. 11 thousand compared with total assets of £S. 7.1 million. The Industrial Bank had no private funds.

³See below, pp. 41-43.

A good indication of the growth of banking activity in the Sudan is the increase in private bank deposits. Figure 2 shows the amount of year end deposits from 1950 to 1965.

In 1951 bank deposits more than doubled, an unusual event which reflected a sharper rise in exports that year coupled with a considerably



Source: International Monetary Fund, International Financial Statistics,
Supplement to 1966-1967 Issues

smaller gain in imports.¹ The following year imports surged ahead, as a result of the rise in incomes and liquidity in 1951, while exports dropped back and bank deposits were liquidated. Since 1953 bank deposits have risen rapidly, in most years at a rate of well over 15 per cent. The rate of increase slowed during 1964 owing to a tight money policy initiated by the Bank of Sudan, but the following year again saw an increase of more than 15 per cent.

U Tun Wai suggests two measures to estimate the relative importance of the banking system in a country. These are the ratio of deposit money to the money supply and the ratio of the banking system's claims on the private sector to national income.² Estimates of these two ratios in the Sudan are shown in Figures 3 and 4.

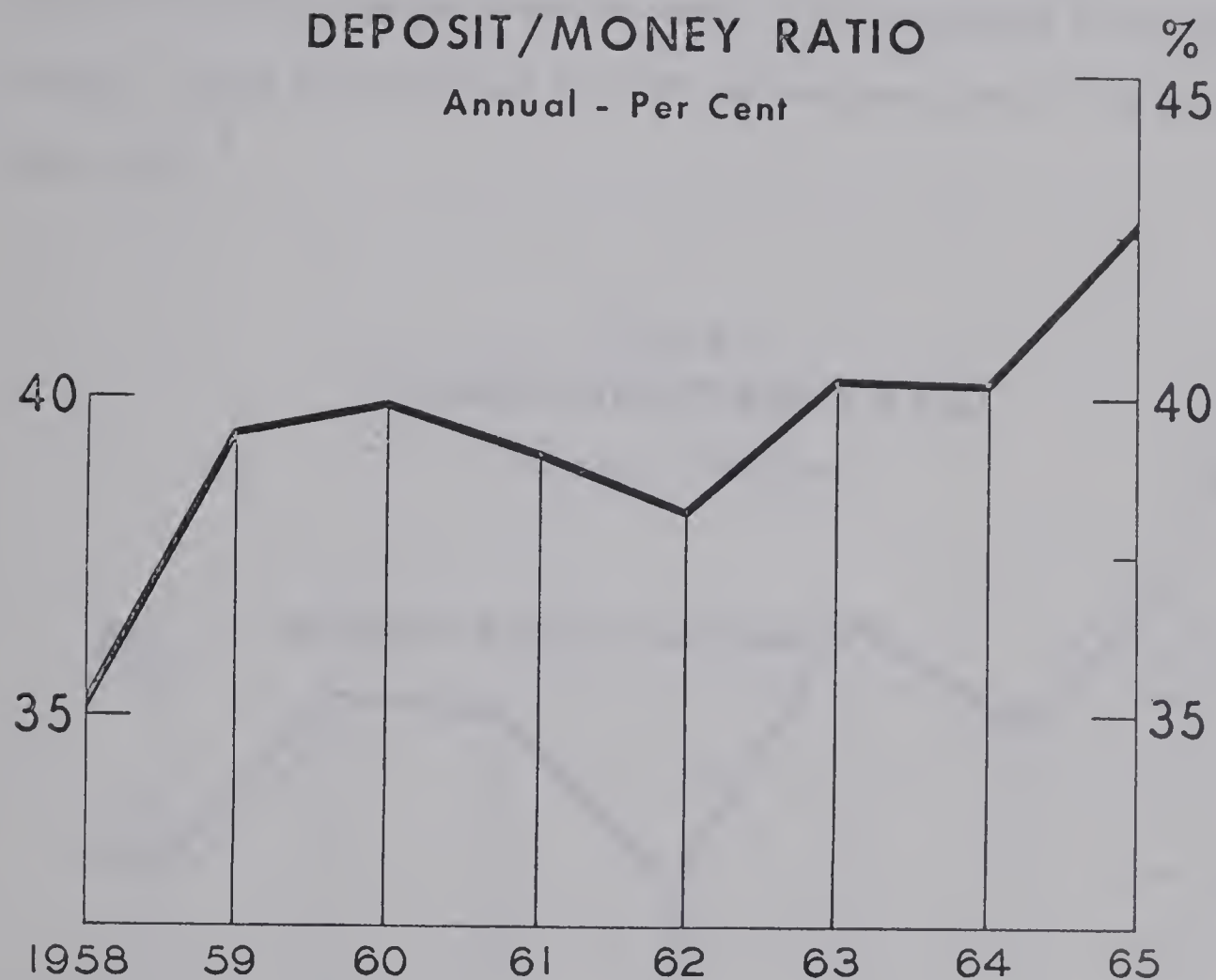
The deposit/money ratio in Figure 3 shows a definite upward trend, indicating that the banking system in the Sudan is becoming relatively more important. But the ratio is still much lower than in more developed countries. In the United States and Australia, for example, the deposit/money ratio was close to 80 per cent during the years 1958-65,³

¹In 1951 exports rose to £S. 78.9 million from £S. 35.8 million while imports increased to £S. 42 million from £S. 27 million. The following year exports dropped back to £S. 46.2 million while imports rose to £S. 61.7 million. International Monetary Fund, International Financial Statistics, Supplement to 1966/67 Issues, p. 233.

²U Tun Wai, "Interest Rates in the Organized Money Markets of Underdeveloped Countries," International Monetary Fund Staff Papers, V (August, 1956), 249.

³International Financial Statistics, op. cit.

Figure 3
DEPOSIT/MONEY RATIO
Annual - Per Cent

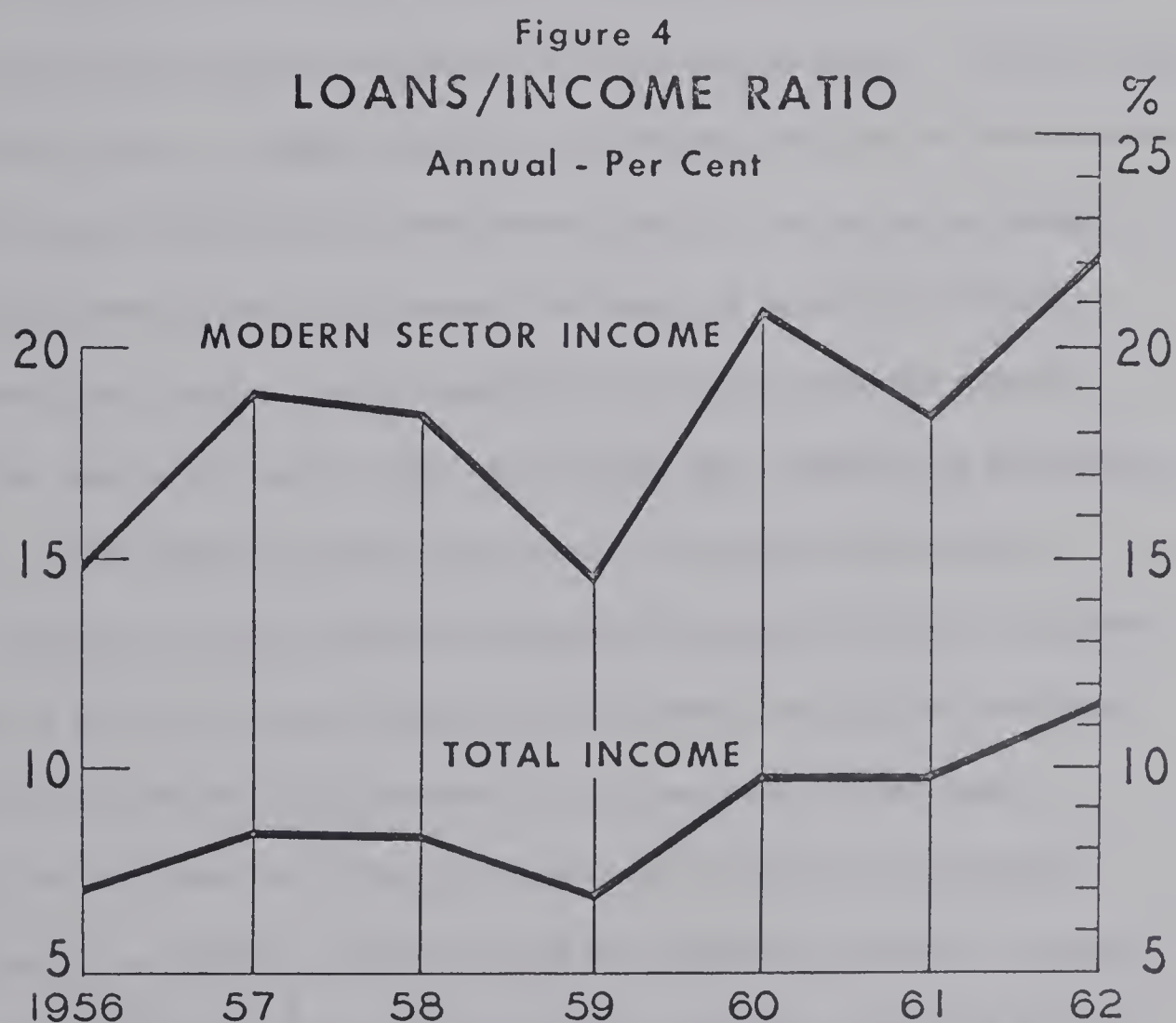


Source: International Monetary Fund, International Financial Statistics, Supplement to 1966-67 Issues

well above the peak level of 49 per cent reached in the Sudan in 1965. It should be noted that the ratio in the Sudan in 1965 was unusually high because the commercial banks were extremely liquid.¹ Had the banks increased their

¹ The reasons for this liquidity are discussed below, pp. 73-75.

advances, as they could easily have done, the numerator of the ratio representing deposits would have risen less than the denominator, deposits plus currency, and the ratio would have fallen. The development of the deposit/money ratio in the Sudan, however, is very similar to the experience in Ghana, where the ratio rose from 37 per cent per cent in 1958 to 53 per cent in 1965.¹



Source : Bank of Sudan, 1962 Annual Report and Sudan, Economic Survey 1963.

¹International Financial Statistics, op. cit.

In Figure 4 the ratio shown is that of commercial bank advances outstanding at the end of the year to gross domestic product for that fiscal year. In view of the large subsistence sector in the Sudan having no access to the banking system, the ratio of loans to income in the modern sector only is also shown.

Both the ratios in Figure 4 show an upward trend. This is normal for a developing economy since more and more firms can be expected to turn to outside financing to complete their investment plans. Because there is as yet no money or capital market in the Sudan, the bulk of this external financing must come from the commercial banks. In mature economies, where firms have grown large enough to finance a large part of their investment from internal funds, and where financial markets offer an alternative source of finance, the ratio might fall, although an increase in consumer credit could maintain the ratio at a relatively high level.

There is a large difference between the ratio of loans to income in the modern sector only and loans to total income, the former reaching a peak of 22 per cent in 1962 compared to $11\frac{1}{2}$ per cent for the latter. Although the data does not cover a long enough period for any definite conclusions to be drawn, it appears that the difference between the two ratios is decreasing. This is certainly to be expected if income in the modern sector is growing faster than total income.

There is some doubt as to which ratio in Figure 4 is the most

meaningful as a measure of credit conditions in the Sudan. If producers in the subsistence sector had no desire to increase their income by expanding output, and would not take advantage of capital made available to them, then the measure of bank loans to income in the modern sector should be used. But if producers in the subsistence sector are prevented, by lack of credit facilities, from increasing output or specializing in a particular cash crop, then the measure of loans to total income would indicate this dearth of credit facilities. The Sudan must lie in between these two extremes. Many producers in the subsistence sector could and would make use of additional credit if it were made available to them.

Thus while the ratio of loans to modern sector income in the Sudan is the same as the loans/income ratio in Canada and only one per cent less than the same ratio for Australia and the United States¹ this over-estimates the importance of banking in the Sudan economy. Although the banks play an important role in financing trade and, to a lesser extent, industry, they extend almost no credit to agriculture and none to the traditional sector of the economy. These latter sectors must rely on the unorganized money market for financial assistance. The major sources of credit in the unorganized money market are the Agricultural Bank, credit cooperatives and private moneylenders. The terms of lending vary considerably. For example, the Agricultural Bank "avails cultivators of all facilities to obtain short, medium

¹U Tun Wai, op. cit., p. 252. The ratios are for the year 1953. The same ratio for other developed countries ranged from 15 per cent (Belgium-Luxembourg) to 101 per cent (Switzerland).

and long term credit, both in cash and in kind, for the purchase of farm machinery, fertilizers, sowing seeds, sacks, etc."¹ Short term loans are made at 6 per cent plus commission and medium term loans at 8 per cent. The Bank has not been very active in making long-term loans, but has undertaken the marketing and ginning of cotton for the borrowers for a commission of 2-3 per cent.² Loans have been extended "chiefly to private cotton growers along the White Nile and the Nile north of Khartoum. However the Bank is showing great interest in the Equatorial Province (South) where coffee, pineapples and wheat can be grown."³

Following the Second World War the government of the Sudan took steps to assist rural borrowers by promoting cooperative credit societies. These increased rapidly in number from ten in 1949 to more than one hundred in 1956.⁴ The societies obtain money from the government at a rate of interest of 6 per cent and reloan to members at 12 per cent. They will also, for a commission, assist the borrower in marketing his crop. Valuable as these efforts may be, they have not been sufficient to take rural borrowers out of the hands of the money lenders.

Private money lenders continue to be the most important source of credit in the unorganized market. They extend a type of credit known as

¹Sudan, Trade Directory of the Republic of the Sudan, 1965, p. 49.

²Jucker-Fleetwood, Money, op. cit., p. 160.

³Ibid.

⁴U.S. Army, Area Handbook of the Republic of the Sudan (Washington, 1960), p. 418.

shayl,¹ a small loan either in cash or kind secured by the next crop. The loan is usually repaid in produce, the amount of repayment being stipulated at the time of the loan as either a fixed amount of produce or a fixed money value of produce, depending on whether the lender expects prices to rise or fall. No estimates have been made of the average rate of interest under shayl, although Wilmington describes one transaction which he believes to be typical where the interest rate was 100 per cent per annum.²

While the interest rates in the unorganized money market range from 6 per cent to more than 100 per cent, with the majority of loans being made at the higher rates, the interest charged and paid by the commercial banks is not much different from the interest structure in developed countries. "The minimum rate is 6-6½ per cent to first rate and important customers only, 7-7½ per cent is the usual rate, while 8 per cent is charged on medium term loans."³ In 1958 the banks paid 1 and 2 per cent on time deposits of six and twelve months respectively and 0.75 per cent on demand deposits of fifteen days.⁴

U Tun Wai would attribute the low interest rate structure in the banking system to the fact that the organized market is "dominated by

¹A complete description of several forms of shayl is given by Martin W. Wilmington, "Aspects of Moneylending in Northern Sudan," The Middle East Journal, IX (Spring, 1955), 139-46.

²Ibid., p. 142.

³Jucker-Fleetwood, Economic and Financial Aspects..., op. cit., p. 12.

⁴U.S. Army, op. cit., p. 418.

commercial banks which have been modeled upon the commercial banking practices in the developed countries."¹ This is certainly true of the Sudan where only two commercial banks are indigenous and one of these is partly owned by a foreign banking company. On the other hand, the high level of interest rates in the unorganized money market is attributed to a combination of a small supply of loanable funds and a high demand for these funds.²

Such a disparity of credit conditions and lending rates is not a healthy situation. While it is true that an unorganized money market may still exist in the developed countries, it is small in absolute terms and for many borrowers represents an alternative source of funds if credit conditions are tight in the organized market. In the Sudan the largest sector of the economy has no other source of funds but the unorganized market. The result is certain to be a lopsided investment program. In fact in 1963 only 7 per cent of total private investment occurred in the agricultural sector, although this sector is responsible for 55 per cent of total output.

Certainly there is no quick and easy solution to the credit problem in the Sudan. But the situation would be improved if the interest rate structure in the banking system were altered to reflect the over-all scarcity

¹U Tun Wai, op. cit., p. 278.

²U. Tun Wai, "Interest Rates Outside the Organized Money Market in Underdeveloped Countries," International Monetary Fund Staff Papers, VI (November, 1957), 80-142, especially pp. 197-13. See also Anthony Bottomly, "Credit Expansion and Growth in Underdeveloped Rural Areas," Indian Economic Review, VI (August, 1962), 125-43.

of credit. In particular the rates paid by the banks on saving deposits should be raised. This may result in a small increase in total saving, which in itself would be good. Even more important, such a move should attract "an increasing part of total saving away from sterile or unproductive assets, such as gold, speculative stocks, office or residential building, and into controlled channels."¹ Some other ways of improving the distribution of credit are discussed in the following chapter.

¹ John Pesmazoglu, "The Relation Between Monetary and Fiscal Policy," Government Finance and Economic Development, ed. Alan T. Peacock and Gerald Hauser (Paris: Organization for Economic Cooperation and Development, 1965), p. 97.

CHAPTER III

COMMERCIAL BANKING

At the present time economic development is the primary concern in the Sudan, and the banking system is expected to play a part in the development process. Unfortunately there is some confusion as to what role the commercial banks can and should play in the economic development of a country.

Stephen Enke suggests that the main role of the banking system is to foster saving on the part of the public and to channel this saving to investors.¹ This is an oversimplification of the relationship between savings and bank deposits. While it is true that bank deposits may represent saving on the part of the owner, they may also be an alternative way of holding money which the owner intends to spend in the near future. Empirically it is impossible to separate the two types of deposits, while the distinction is not even very clear conceptually. It seems fair, however, to assume that savings accounts in the commercial banks will more nearly fit Enke's conception than will current account deposits. Thus a look at the value of savings deposits in the Sudan may give some indication of the role of the banks in fostering saving.

¹ Stepehn Enke, Economics for Development (Englewood Cliffs: Prentice-Hall, 1963), pp. 262, 264.

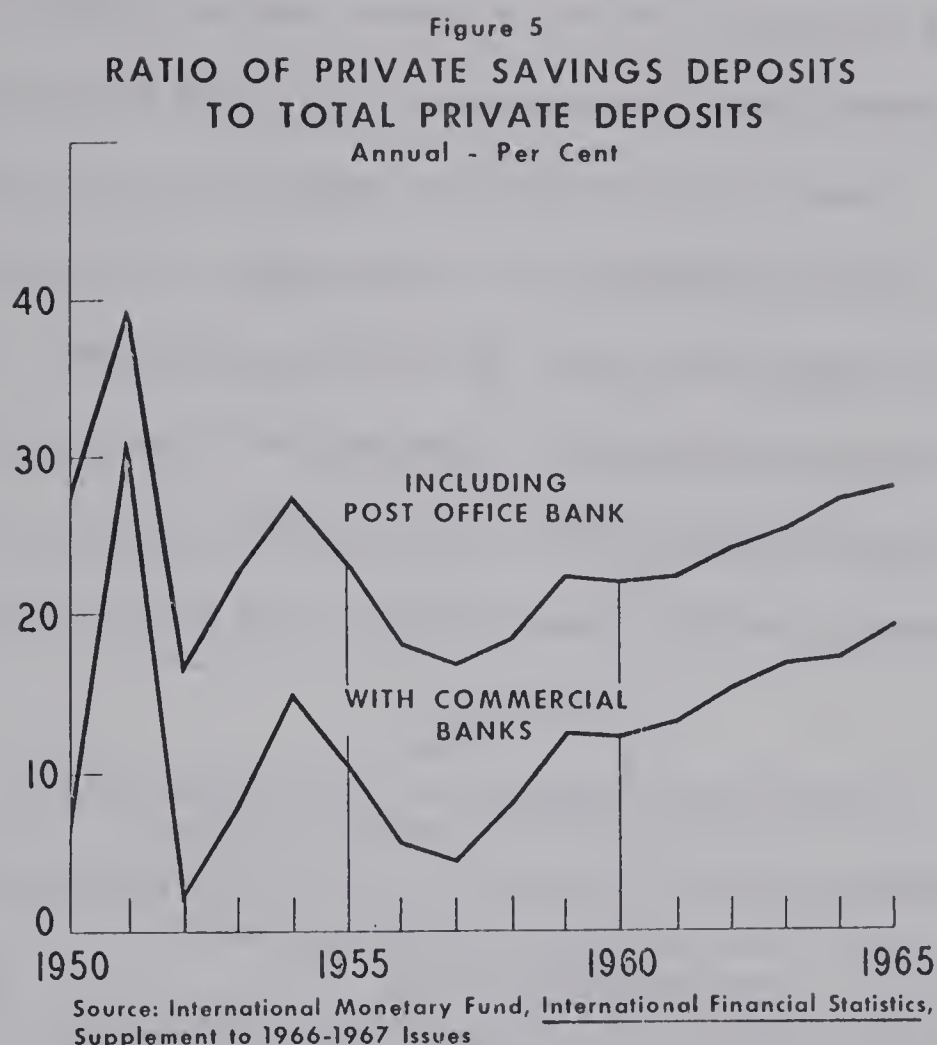


Figure 5 shows private savings deposits with the commercial banks as a proportion of total private commercial bank deposits for the years 1950-65.¹ Also shown are total private savings deposits, including those with the Post Office Savings Banks, as a proportion of total private deposits, including deposits with the Post Office. Although these latter deposits are liabilities of the Government and do not represent a source of financing for the private sector they are, from the depositor's point of view, almost homogeneous with savings deposits in the commercial banks. Then too, the spread of the

¹ The term savings account, as used throughout this text, includes all accounts other than demand deposits.

commercial banking network outside of the main centres is a relatively recent phenomenon and is still incomplete; for many Sudanese the Post Office Banks are the only banks to which they have access.

Aside from 1951, when unusual circumstances caused a sharp rise in liquidity,¹ savings deposits with the commercial banks have never exceeded 20 per cent of total deposits, although this proportion has maintained an upward trend since 1957. If Post Office deposits are included the ratio rises but, as can be seen in Table 5, remains substantially

Table 5
Private Savings Deposits As A Proportion Of Total Private
Deposits For Selected Countries And Years^a

Year	Savings Deposit/Total Deposit Ratio - Per Cent						
	Australia ^b	Ghana	India ^c	Sudan		U. A. R.	U. S.
				Commercial Banks Only	Including P. O. Banks		
1950	51	20	35	8	28	20	28
1955	52	23	43	11	23	29	30
1958	55	34	59	8	19	31	35
1960	59	36	60	12	22	32	38
1963	65	37	50	17	26	50	46
1965	69	62	53	19	28	50	51

^aSource: International Monetary Fund, International Financial Statistics, Supplement to 1966/67 Issues.

^bIncludes deposits with Savings Banks.

^cIncludes deposits with Cooperative Banks.

lower than in a number of other countries. The inter-country comparisons in the table may be distorted due to institutional differences between the

¹ See above, pp. 21-22.

various countries.¹ Nevertheless it is disturbing that the savings deposit/total deposit ratio in the Sudan has risen much more slowly than in Ghana and the United Arab Republic, two countries which are close to the Sudan in terms of economic development. It is also disturbing to note how slowly the gap between the two ratios in Figure 5 is diminishing. For the period 1960-65 the two lines on the chart are almost parallel, indicating that even during this period of rapid growth of the banking system, private savings deposits with the banks grew no faster than deposits with the Post Office banks.

A rough approximation of the amount of private saving which takes the form of deposits in savings accounts may be obtained by comparing the level of current saving with the change in savings deposits, as in Table 6. The data shows that while private saving ranged from £S. 7.7 million to £S. 24.5 million over the period, the increase in private savings deposits never exceeded £S. 1.34 million. Both the small size of savings deposits in relation to total deposits and the small changes in savings deposits in relation to total savings suggest that the banks in the Sudan are at best a minor factor in fostering saving.

Another claim made by Enke is that an increase in the willingness

¹For example deposits with the Savings Banks in Australia are included while deposits with the Savings and Loan Associations in the United States are excluded, although the two sets of institutions are in most respects the same.

Table 6

Total Private Savings And Change In Private Savings Deposits
1955-56 to 1962-63^a

Year	Change In Private Savings Deposits	Total Private Savings ^b
	- - - - - £S. millions - - - - -	
1955	- .23	11.3
1956	- .10	12.2
1957	.28	13.7
1958	.60	13.9
1959	1.16	7.7
1960	.45	24.5
1961	.87	13.5
1962	1.34	20.0

^aSource: Sudan, Economic Survey 1963, p. 22 and International Monetary Fund, International Financial Statistics, Supplement to 1966/67 Issues, p. 232.

^bFor fiscal year beginning July 1.

of the public to hold bank deposits instead of currency will enable the banks to decrease the margin between the interest rate paid on deposits and the rate charged on loans.¹ Unfortunately Professor Enke fails to show just how this comes about. He bases his conclusion on a formula showing the minimum rate of interest a bank can charge for a loan:

$$r = id + e$$

where r is the minimum rate of interest the banks can charge on a loan, i is the rate paid by banks on deposits, d is "the proportion of customer

¹Enke, op. cit., pp. 265- 66.

loans, and so on, that drain away through withdrawals in currency, "¹ and e is the administrative cost of each dollar of loans. The derivation of this formula is based on the assumption that "if the bank's currency and other drains are less than 1.0 of loans, more than $x \sqrt{\text{dollars}}$ can be lent, even though only $x \sqrt{\text{dollars}}$ was borrowed."² The fallacy of the assumption that a bank can loan out more money than has been deposited with it needs no explanation.³

In fact a bank cannot loan out as much money as has been deposited with it since some of the deposit must be kept in reserve. The formula for the minimum rate which a bank can charge on loans should therefore be:

$$r = (i / d) + e$$

where r is once again the minimum rate charged on loans, i is the rate paid on deposits, e is the cost for each dollars worth of loans but d now represents one minus the reserve ratio or the proportion of deposits which can be loaned.⁴

¹Ibid.

²Ibid., p. 266.

³The fallacy persists even if by "borrowed" Enke means money the bank borrows from the central bank. Although a bank can loan as much money as it borrows from the central bank, it cannot loan more.

⁴A bank must receive as great a return on a loan of dx dollars as it has paid on the original deposit of x dollars plus the administrative cost of the loan of dx dollars. Therefore:

$$\begin{aligned} r dx &= ix + dex \text{ and} \\ r &= (ix + dex) / dx \\ \text{or } r &= (i / d) + e \end{aligned}$$

From the revised formula it can be seen that as d rises (the reserve ratio falls) either r will fall or i may rise. The difference between the rate of interest paid on deposits and that charged on loans will fall. But the factors which will cause d to rise do not include the willingness of the public to hold bank deposits instead of currency. Instead the important factors will be the availability of a lender of last resort from which the bank can obtain funds in an emergency, the ease and rapidity with which funds can be transferred to a branch in need, and other institutional factors.

Enke may not be completely wrong in asserting that the willingness of the public to hold currency, as opposed to bank deposits will have an effect on the spread between bank lending and borrowing rates. If banks operate under a decreasing cost schedule, the administrative cost e of making loans will decline as the amount of loans made by any bank rises. Whether or not banks do operate under falling costs is a matter for debate at the present time.¹ But even if this were the case, the willingness of the public to hold deposits would be only one of the factors which determined bank costs; other, possibly more important, factors would be the structure of the banking system and the size of the economy.

¹See Stuart I. Greenbaum, "Competition and Efficiency in the Banking System - - Empirical Research and Its Policy Implications," Paper presented to the Conference of University Professors, The American Bankers Association, Princeton, New Jersey, Session III (September 17, 1966).

The main effect of the commercial banks on development in the Sudan will be through their lending activity. This activity will make funds available to specific sectors of the economy and, because loanable funds are limited, will prevent funds from reaching other sectors. The rate of growth of the economy can be increased if the criteria on which bank lending decisions are based can be brought closer to the correct criteria for investment decisions in an underdeveloped economy.¹

There is ample evidence that bank lending practices will not coincide with the optimum investment pattern. The banks themselves are not entirely to blame for the situation, since entrepreneurs may very well be wary of the types of investment which have the highest priority. They may prefer to invest in industries that have already been established and have proven profitable, rather than pioneer new fields.² The following quotation illustrates the point.

¹ This is easier said than done. There are almost as many ideas on the correct investment criteria in an underdeveloped country as there are writers on the problem of development. For a sample see: Benjamin Higgins, Economic Development (New York: W. W. Norton & Co. Inc., 1959), pp. 642-68; Albert O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), pp. 76-97; and Leading Issues in Development Economics, ed. Gerald M. Meier (New York: Oxford University Press, 1964), pp. 231-50.

² See Anthony Bottomly, "Keynesian Monetary Theory and the Developing Countries," The Indian Economic Journal, XII (April-June, 1965), 335-46. He cites as an example a South American country where there are a number of textile mills, all operating well below capacity, but no button factory.

In the past wealthy Chinese families of Malaya and Singapore have tended to steer clear of what was for them the unknown world of industry. It wasn't that they lacked financial boldness. The risks they put up with, say, in trying to corner the pepper market would chill many a Western entrepreneur. But starting up a factory involved taking unfamiliar chances. For one thing, it might mean hiring technically trained outsiders and putting them in top management. Traditionally, the overseas Chinese businessman has preferred to play the lone wolf, trusting only his relatives.¹

This pattern of behavior is, at least to some extent, true of the Sudan. Barclay reports that fifteen informants, questioned about the relative merits of various occupations, rated that of merchant highest, while a second choice for many was being owner-supervisor of an agricultural irrigation scheme (possibly the equivalent of a plantation).² In the village being investigated by Barclay, Burri al Lamaab, there were twenty small shops catering to a population of 2,400.³ Since the land which can be irrigated in the Sudan is limited, an easing of the availability of credit may well lead merely to an increase in investment in inventory by traders. An examination of Figure 6 tends to confirm this idea.

¹"Business Around the Globe," Fortune, December 1964, p. 60.

²H. B. Barclay, Burri al Lamaab A Suburban Village in the Sudan (Ithaca: Cornell University Press, 1964), pp. 18-19.

³Ibid., p. 18.

Figure 6
SOME CATEGORIES OF BANK ADVANCES

Quarterly - £S Millions

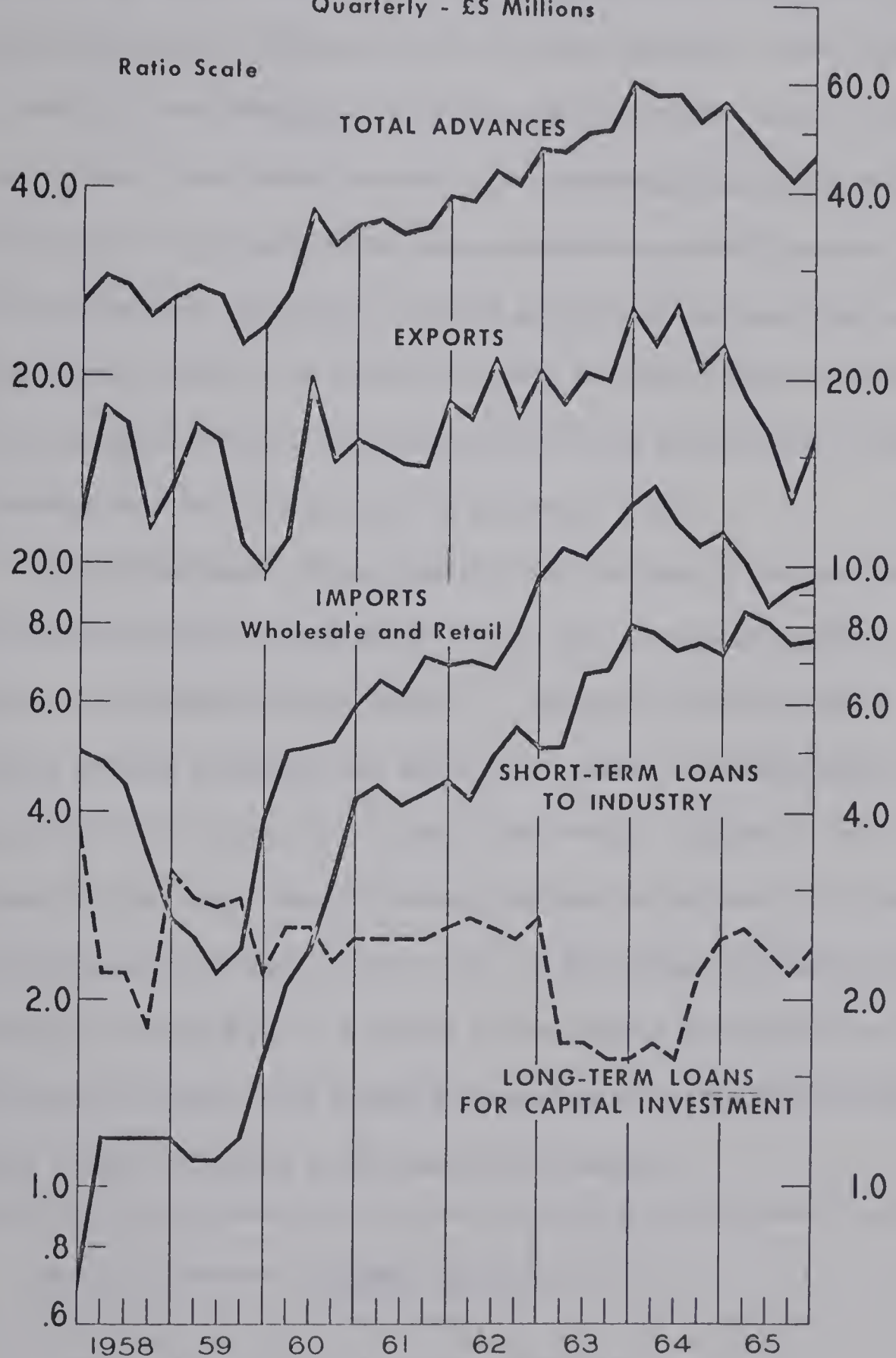


Figure 6 shows the volume of commercial bank advances in various categories for the years 1958-1965. At the beginning of this period by far the largest proportion of advances went to finance exports. Short-term loans to industry were negligible while long-term loans for capital formation were roughly 10 per cent of total advances. From the third quarter of 1959 to the end of 1960 short-term industrial loans increased dramatically to about 15 per cent of total advances. Since that time this proportion has remained constant. On the other hand, long-term loans for capital formation have remained constant in absolute amount, the proportion of loans going to this category falling steadily to a low of 5 per cent at the end of 1965.

Jucker-Fleetwood argues that it is not the duty of commercial banks to finance capital formation but rather that they should restrict themselves to supplying working capital.¹ Certainly because of the short-term nature of their liabilities the banks must retain a considerable portion of their portfolios in more liquid types of securities. But there can be no good reason for the banks actually having reduced the proportion of loans going into long-term advances since 1958. In fact with a central bank now in a position to assist them as a lender of last resort the commercial banks should be able to reduce their liquidity somewhat and actually increase the proportion of their advances in the long-term category.

¹Jucker-Fleetwood, Money, op. cit., p. 133.

A comment by Barclays Bank is interesting in this respect:

Medium term finance to industry is now available from the Industrial Bank. This Government institution was formed to provide a source of medium term capital finance which can no longer be provided by the commercial banks whose assets are fully occupied in financing the seasonal trade of the country.¹

The Industrial Bank, rather than being an additional source of credit for industry, has been unable to even maintain long-term industrial credit at a constant proportion of bank credit. From its inception to the end of 1964 the Industrial Bank had advanced a total of £S. 831 thousand.² Assuming that none of this had yet been repaid, this brings total long-term credit to industry to £S. 3.3 million, just under 6 per cent of total commercial bank advances. This is a smaller proportion than industry received in the 1958-1960 period.

Nor has agriculture fared any better. In 1958, the year before the Agricultural Bank commenced operations, commercial bank loans to finance crop cultivation made up 15 per cent of total advances. Since that year, this type of loan has become insignificant, and in 1965 represented less than 2 per cent of total bank advances. The Agricultural Bank has alleviated the situation, although it has been unable to keep the proportion of credit going to agriculture at the 1958 level. During the 1965 growing season the Agricultural Bank extended loans totalling £S. 4.87 million, with almost 92

¹Barclays Bank, Overseas Survey 1963, p. 133.

²Nyhart and Janssens, op. cit., p. 364. This figure includes equity investments as well as loans.

per cent of this going to the large cotton schemes¹. Since commercial bank loans to finance crop cultivation were less than £S. 1 million during that season,² total finance to cultivators did not exceed 10 per cent of total commercial and Agricultural Bank advances.

In fact the commercial banks in the Sudan have turned more and more to financing just one aspect of the country's trade - imports. The proportion of commercial bank loans to finance exports has fallen from roughly 50 per cent between 1958 to 1961 to about 35 per cent in 1965. On the other hand loans to finance imports have risen from 10 per cent of the total in 1958 to more than 20 per cent in 1965.

The commercial banks' preference for lending to traders, and in particular importers, is easily understood. The loans are normally of short duration and are well secured by the goods which they are used to finance. If, however, the banking system is to contribute to the development of the country some way must be found to place a larger share of the available loanable funds at the disposal of entrepreneurs who will invest them in fixed capital. This can only be accomplished if more effective use is made of the specialized financial institutions, the Agricultural Bank of Sudan and the Industrial Bank of Sudan.

¹ Information obtained through private correspondence with the Agricultural Bank. See Appendix III.

² Bank of Sudan, Annual Report, VI (1965).

The importance of the development banks lies "not merely in the final stage of financing but also in the preliminary phases of survey and appraisal of planned investment."¹ In fact this latter aspect of the work of development banks is the most important part of their role. Surveying and appraising projects, and in some cases assisting in the initial planning, is a costly process requiring specialized staff. As the Industrial Bank of Sudan reported:

The novel and complex character of the Bank's operations claims a wide variety of aptitudes from its staff in regard to the academic knowledge of economic, financial, technical, social and managerial problems of industrial development and the practical knowledge and experience in the efficient performance of day to day operations.²

It would be neither practical nor efficient to have such a staff in every commercial bank; specialized institutions are therefore a necessity.

Despite the important role to be played by the Agricultural and Industrial Banks in the Sudan, they are at present only of marginal importance in the over-all financial structure. In 1964 assets of the two development banks totalled £S. 8.5 million, compared with commercial bank assets of £S. 61.9 million.³ And while the Agricultural Bank is virtually the only source of credit for cultivators, the Industrial Bank has not attained such preeminence; long-term commercial bank loans for capital invest-

¹Stratis G. Andreadis, "Financing Economic Development," Statist, December 2, 1966, p. 214.

²The Industrial Bank of Sudan, Annual Report of the Board of Directors for the Year 1964, p. 12.

³Nyhart and Janssens, op. cit., pp. 362-65 and Bank of Sudan, Annual Report, V (1964).

ment at the end of 1964 were more than double total Industrial Bank loans and investments.¹ The small size of the Industrial Bank may be attributable in part to its recent origin; it did not begin operations until August, 1962. Nevertheless it seems certain that neither of these institutions will be able to play a major role in the economic development of the country unless they can obtain funds from the organized money market and/or private savings.

Up to the present time both the Agricultural and the Industrial Banks have received almost all their funds either from the Bank of Sudan or from the Government,² which in turn has reduced its assets or increased its liabilities with the Bank of Sudan.³ It cannot be stated categorically that the Bank of Sudan is not a suitable source of financing for these types of institutions; it can, however, be shown that the amount of real capital which can be financed by the central bank is limited and that the limits are rather small.⁴ Unless the net financial position of the Government improves dramatically, an unlikely possibility in view of the difficulty of increasing revenue and the need for social overhead capital, the growth of the development banks will be limited unless they can tap private savings.

¹ See above pp. 40 and 42.

² The Agricultural Bank had £S. 11 thousand in private deposits at mid-1964. See Nyhart and Janssens, op. cit., p. 362.

³ See above, pp. 8-9 and below, pp. 65-67.

⁴ See below, pp. 93-97.

There are a number of ways in which the two banks can attract private funds. Both institutions could be empowered to accept time or savings deposits and to sell bond, debentures or notes. The Agricultural Bank, with branches in ten towns and presumably making loans to a large number of individuals, should be able to compete actively for deposits. The Industrial Bank, with its operations centered in Khartoum and making larger loans to fewer individuals, would not be in as promising a position in regard to deposits but should have an advantage in tapping other sources of funds. For example the Industrial Bank might ask one or more of the commercial banks to participate with it in making a loan for a given project, each participant putting up a share of the total amount. Such a procedure is common among banks in more developed countries where the size of the loan would involve too big a risk for any one institution. In the Sudan this procedure would enable the Industrial Bank to stretch its funds to cover a larger amount of investment. An alternative would be for the Industrial Bank to discount loans with the commercial banks once a project which it has financed has been in operation for several years and has proven successful. The Bank might also arrange to obtain bonds convertible into shares from some of its borrowers; these could be converted as the Bank found opportunities of selling the shares. All of these procedures would involve a secondary benefit in that they would help build up the financial markets in the Sudan.

This extension of activities on the part of the development banks will only be possible if the Banks' lending and borrowing rates reflect market rates of interest. In setting lending rates the Banks will have to make adequate allowance both for the cost of surveying and appraising the planned investment and also for risk, since lending to new businesses or for new projects does involve a substantial risk. In a study of the operation of the Nigerian Federal Loans Board, Mr. Schatz found that only 38 per cent of the projects for which loans were granted were successful, despite the fact that only 18 per cent of the total loan applications were approved.¹ If the development banks fail to make adequate allowance in lending rates for the cost of appraisal and risk, yet have to pay market rates for borrowed funds, they will end up either operating at a loss or cutting back on borrowing from the most expensive sources and thus reducing the over-all scope of their operations.

If a lender desires a rate of return of r per cent, the annual cost of appraising loan projects is a per cent of loans outstanding and the lender expects d per cent of his total loans outstanding to be defaulted on each year, then the lowest rate of interest i at which he can make loans will be determined

¹ Sayre P. Schatz, "The Capital Shortage Illusion: Government Lending in Nigeria," Oxford Economic Papers (New Series), XVII (July, 1965), 306-16.

by the formula:

$$i = a + (1 + r/1 - d) - 1^1$$

The commercial banks in the Sudan are at present charging 7-8 per cent on loans. They are unlikely to rediscount loans made by the development banks for less. Appraisal costs (which must not be confused with the general overhead expenses borne by all financial institutions) are difficult to determine with any degree of precision but probably exceed 1 per cent; this figure could then be taken as a conservative estimate. For the default rate a conservative estimate might be 2 per cent. With r , d and a equal to 7, 2 and 1 per cent respectively, the minimum rate of interest on long term loans made by the development banks would have to be 10.2 per cent. This compares with the rates of 7-8 per cent charged by the Industrial and Agricultural Banks.²

The Agricultural Bank did show a profit for the year ending June 30, 1964 (the Industrial Bank did not) but this amounted to only £S. 85 thousand, less than 1.2 per cent of total assets of £S. 7.1 million.³ Part

¹ The formula is derived this way. The lender of \$X wants, at the end of the year, to have good loans outstanding plus repaid principle and interest equal to \$X + \$Xr. Since d per cent of the loans are defaulted on and no principle or interest is regained, the amount of principle and interest either outstanding or repaid is equal to \$X (1-d)i + \$X (1-d).

Since $X + Xr = X (1-d) + X(1-d)i$

Then $(1 + r) / (1 - d) = 1 + i$

And $(1 + r/1 - d) - 1 = i$

² Nyhart and Janssens, op. cit., pp. 362-65.

³ Ibid.

of this profit, if not all of it, must be attributed to the Bank's short-term loans, which are made at close to market rates, and its sales of fertilizers. Thus it would appear that the Bank could not show a profit on long-term lending at present rates of interest if it had to pay for a significant portion of its loanable funds.

If present interest rate policies of the two development banks are maintained it is likely that their ability to increase lending will be sharply curtailed. This would be deplorable indeed, since these two institutions seem to offer the only method of harnessing the nation's financial system to promote economic growth.

CHAPTER IV

CENTRAL BANKING

The Bank of Sudan was established in 1959 by an Act¹ of the Supreme Council for the Armed Forces and commenced operations in February of 1960. The Bank's authorized capital of £S. 1.5 million was wholly subscribed by the Government, and the Governor and Deputy Governor of the Bank, as well as the five other directors are appointed by the Minister of Finance and Economics or by the Council of Ministers on the recommendation of the Minister.² Although the Board of Directors is responsible for the policy and general administration of the Bank,

the minister, with the approval of the Council of Ministers, and after consultation with the Board, may from time to time give to the Board directions of a general character as to the exercise by the Board of its functions in matters which appear to the Council of Ministers to affect the national interest; and the Board shall carry out such directions.³

As outlined in the Act, the principal objectives of the Bank of Sudan are

to regulate the issue of notes and coins, to assist in the development

¹Bank of Sudan Act, 1959, (1959 Act No. 60)

²Ibid., secs. 7, 12 (2) and 13 (1).

³Ibid., sec. 20.

and maintenance of a sound monetary, credit and banking system in the Sudan with a view to the orderly and balanced economic development of the country and the external stability of the currency, and to serve as banker and financial advisor to the Government.¹

Some of these functions had previously been carried out by other institutions. The Sudan Currency Board had been regulating the issue of notes and coins,² while the National Bank of Egypt had been serving as banker and financial advisor to the government.³ But the commercial banking system had been subject to "only moderate and indirect control"⁴ which meant that the Bank of Sudan was entering into at least one completely new field.

To enable the Bank to implement these goals it was given powers which included the right to loan to or rediscount notes from the commercial banks; the right to vary the bank rate; the right to buy and sell securities; the right to vary the legal reserve ratio within the range from zero to twenty per cent; the power to (a) subject all loans by the commercial banks to its approval, (b) fix ceilings on the volume of advances made by any bank for a specific purpose, and (c) fix a ceiling on the total volume

¹Ibid., sec. 5.

²Above, p. 12.

³Above, p. 16.

⁴Brimmer, loc. cit., p. 25.

of loans granted by any bank.¹ The Act also limits the activities of the Bank in certain areas. Under section fifty-seven total advances by the Bank to the government are limited to 15 per cent of government revenue for the year in which the advance is made.² Section fifty-eight limits the total amount of government securities held by the Bank at any time to 50 per cent of the Bank's paid up capital.

What a central bank may do in theory is not always the same as what it can do in practice. This is particularly true in the less developed countries where the statutes setting up a central bank often reflect monetary theory imported from more advanced economies and optimistic hopes of what the future might bring, rather than present circumstances. To some extent this is true of the Sudan.

Although the Bank of Sudan is empowered to conduct open market operations, it seems extremely unlikely that such operations will play an important role in monetary control in the near future. The total volume of marketable government securities is small - - only £S. 3.3

¹Bank of Sudan Act, 1959, secs. 41-45 and 58.

²The Attorney General of the Sudan has interpreted government revenue under this section to mean the combined revenue of the entire public sector of the economy, including the Central Government, all provincial and local councils and all government owned enterprises, or enterprises in which the government participates. Bank of Sudan, Annual Report, VI (1965), 50-51.

million as of March 1966¹ - - and there is no regular market for securities of any type.² Under these circumstances Graeme Dorrance claims that open market operations cannot be used since significant transactions by the central bank will lead to a considerable alteration in prices and will destroy the market for the relevant securities.³ If this is true, Sayers points out that the central bank can alter the interest rate structure merely by changing the prices at which it is willing to buy and sell without actually entering any transactions.⁴ But changes in the interest rate, unaccompanied by changes in the money supply, may be of only limited value, since in most underdeveloped countries spending is not likely to

¹The Bank of Sudan lists among its assets £S. 13 million of non-transferable Treasury Bills issued by the Government as backing for the original note issue and taken over by the Bank from the Sudan Currency Board.

²S.S. Iyengar, "Open Market Operations in Developing Economies," The South African Journal of Economics, XXXIV (December, 1966), 341-42, suggests that where individuals hold commodities or gold, but not bonds, the central bank can curtail inflationary spending by conducting open market sales of gold. This is an interesting possibility, although the low level of foreign exchange reserves in the Sudan precludes its application there.

³G.S. Dorrance, "The Instruments of Monetary Policy in Countries Without Highly Developed Capital Markets," International Monetary Fund Staff Papers, XII (July, 1965), 273-74.

⁴R.S. Sayers, Central Banking After Bagehot (Oxford: The Clarendon Press, 1957), p. 128.

be very interest elastic.¹

The Bank of Sudan has been directed to assist in promoting the development of a money market,² but in view of the requirements for such a market it must be considered a long range project. Dorrance suggests that there must first be a large and steady flow of funds for investment to supply the demand side of the market. There must also be a considerable volume of trade in existing securities. A third requirement, according to Dorrance, is a source of liquid assets which can be converted into medium or long-term securities and will thus have a stabilizing effect on the market.³ It would seem that only economic development will enable the Sudan to meet these conditions; at the present stage of development, attempts by the central bank to foster a money market may lead to an embarrassing conflict of interest. To the extent

¹Not all authorities would agree. U Tun Wai examined the effects of 50 changes in bank rate made in 19 developing countries between 1953 and 1962. He found that "despite the fact that the central banks did not supplement the use of the bank rate with open market operations, they have generally succeeded in influencing the market rates of interest and also the supply of credit." "Role of the Money Market in Supplementing Monetary Policy," in Fiscal and Monetary Problems in Developing States, ed. David Krivine (New York: Frederick A. Praeger, 1967), p. 169.

²The Bank of Sudan Act, 1959, sections 5 and 64.

³Dorrance, loc. cit., pp. 274-75. The problems of developing a money market are also discussed in J.S.G. Wilson, "Some Aspects of the Development of Capital Markets," Banca Nazionale Del Lavoro Quarterly Review, No. 79 (December, 1966), pp. 263-311.

that the Bank must concern itself with the stability and growth of a money market, it may have to forego general economic stability, since there will be limitations on the extent to which interest rates can be allowed to fluctuate if confidence in the marketability of securities is to be maintained.¹

Sayers feels that changing the legal reserve ratio will be the most useful method of monetary control for the newer central banks and describes a number of situations where it has been used successfully.² The value of this control is limited in the Sudan, since the legal reserve ratio cannot be raised above 20 per cent. As can be seen from Figure 7 the actual month end cash reserve ratio of the commercial banks has frequently been above this level. Furthermore, the ratio shows large month to month fluctuations, which would suggest that small changes in the legal reserve ratio may have no noticeable effect on monetary and credit conditions.

Dorrance warns that where the legal reserve ratio is varied frequently by the central bank, the commercial banks will begin keeping excess reserves to cushion any needed adjustments.³ This cushion may

¹The Bank of Canada mentions this in relation to Canada. It would be even more true of an underdeveloped country where the money market was in a formative stage. Submissions by the Bank of Canada to the Royal Commission on Banking and Finance, (May 31, 1962), Submission II: The Role of Monetary Policy, par. 70.

²Sayers, op. cit., pp. 129-30.

³Dorrance, loc. cit., pp. 275-76.

Figure 7

COMMERCIAL BANKS' CASH RESERVE RATIO



Source: International Monetary Fund, International Financial Statistics, XIV-XIX (1961-65).

either lessen the impact on the economy of central bank policies or lengthen the time before the impact is felt, neither of which is particularly desirable. Thus, while changing the legal reserve ratio may be a valuable tool of monetary control, it is most useful in conjunction with other types of control.

When the Bank of Sudan was being organized it may have been felt that manipulation of Government deposits would prove to be the most useful method of enforcing monetary policy. At that time total Government deposits in both the central and commercial banks exceeded total advances by the commercial banks. Over the last few years, however, the situation has altered considerably. Government deposits were less than £S. 4.2 million at the end of 1965 while total commercial bank advances exceeded £S. 45 million. Even after including deposits of government boards there is not much room for monetary adjustment in this way, although it has proven useful as a supplement to other forms of control.

Direct regulation of bank lending has been used from time to time in the Sudan, mainly in attempts to ease the pressure on foreign exchange reserves.¹ Normally in these situations the commercial banks have been directed to limit their lending to importers. However the Bank has the power to limit total commercial bank lending, and thus has an alternative to varying the legal reserve ratio. This type of control has some serious side effects which make it undersirable as an everyday tool of monetary policy. In the first place the limit on bank lending must be expressed either in absolute terms, in which case the larger banks are

¹ Mahhouk and Drees, loc. cit., p. 167.

hurt more than the smaller banks, or in relative terms, in which case the size relationship among the banks is frozen. A second effect may be of even more importance in the Sudan. When the legal reserve ratio is increased the banks can still increase their lending if they can induce the public to hold less currency and more bank deposits. For reasons discussed in an earlier chapter¹ this would probably be a desirable situation. But when a limit is placed on the amount a bank can loan, the benefit it might gain from an increase in deposits is reduced or lost completely and it will no longer attempt to induce the public to hold deposits rather than currency. Thus this too must be considered a control for extraordinary circumstances rather than an everyday tool.

Rather than limiting total commercial bank lending, the Bank can impose limits on loans for specific purposes. Madan has pointed out that experience has proven the effectiveness of this type of control to be both "limited and variable"² and he goes on to argue that "quantitative controls are generally more effective in their negative aspects viz., prevention of the flow of credits to undesirable sectors, than in their

¹ See above, Chapter III.

² B.K. Madan, "The Role of Monetary Policy in Economic Development", A Lecture Delivered at the Fifth SEANZA Central Banking Course Held at Karachi January 13 to March 20, 1964. SEANZA Lectures (Karachi: State Bank of Pakistan, 1964), I, 73.

positive aspects of directing adequate flow of credit on reasonable terms to certain sectors."¹ Even the negative aspect of selective credit controls may not be too effective, for if the flow of bank credit to finance acceptable activities is increased there will tend to be some easing in other types of credit for less desirable activities. In spite of these qualifications, Dorrance feels that there may be some value in this type of control when used in conjunction with a development plan designed to foster growth in specific areas.²

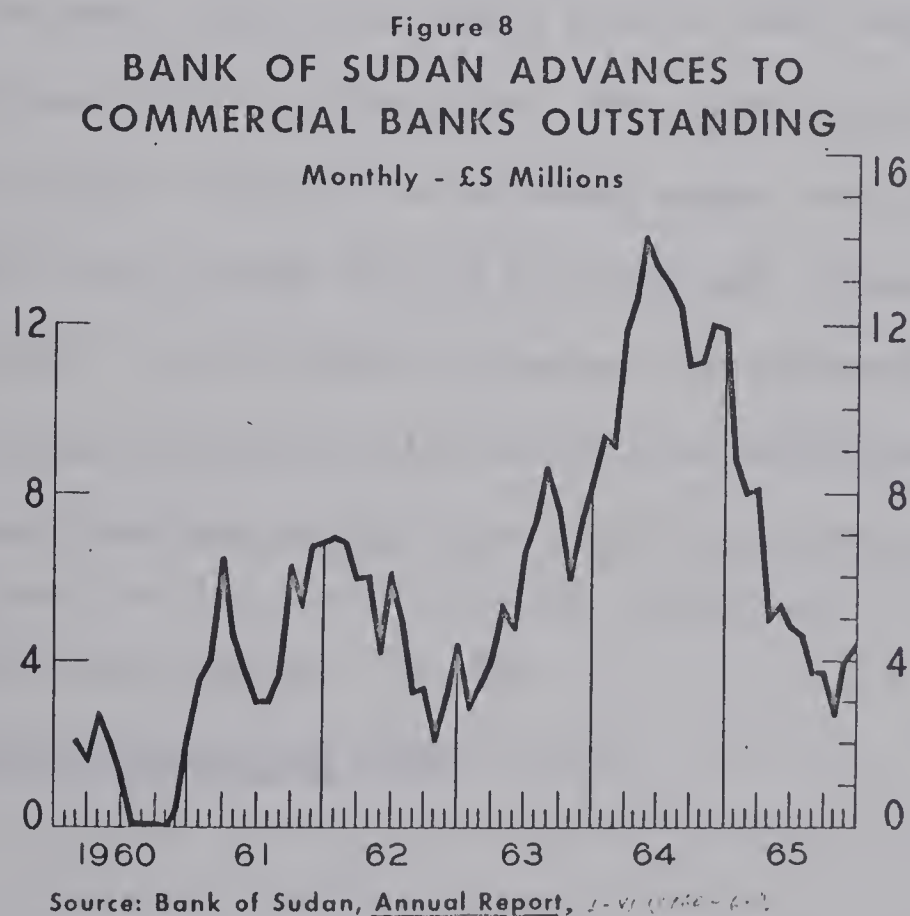
The final method of implementing monetary policy in the Sudan is through the Bank of Sudan's lending policies. As in most countries with a predominantly agricultural economy the demand for bank credit in the Sudan has large seasonal variations. To meet these extraordinary seasonal demands the expatriate commercial banks in some less developed countries have often tended to borrow from their head office in the mother country.³ But because the Sudan was using Egyptian currency, the commercial banks found it convenient to borrow from the National Bank of Egypt. Thus when the Bank of Sudan took over the assets of the NBE in 1960 it found that notes of the commercial banks formed part of its portfolio.

¹Ibid.

²Dorrance, loc. cit., p. 273.

³This seems to be the case at least in Uganda, Kenya and Tanzania. See East African Currency Board, Report for the Year Ending 30th June, 1966, p. 67.

Figure 8 below shows the amount of loans from the Bank of Sudan to the commercial banks outstanding at the end of the month from February 1960 to the end of 1965. It appears that during the first year of operation of the new central bank the commercial banks were wary of approaching it for financial aid; by October of that year its advances to the banks had been eliminated. However demands by exporters for credit facilities, which reach a peak in the fourth quarter, forced the commercial banks back to the credit window, and commercial bank indebtedness rose rapidly. In fact it would have been hard for the commercial banks to resist the offer of loans from the Bank of Sudan. "In most developing countries, where financial markets are in an early stage of evolution, the desires of the community to borrow are likely to be almost insatiable at any



reasonable level of interest rates."¹ Thus provided that it charged a lower rate of interest than the banks received on advances, the Bank should have been able to make loans to the commercial banks not only to assist with seasonal pressures, but in virtually unlimited amounts. The rapid increase in bank borrowing from the Bank of Sudan indicates that this was indeed the case.

The Bank Act stipulates that the Bank of Sudan cannot rediscount or purchase notes that do not mature within nine months, in the case of securities to finance agricultural operations, or within three months for other types of securities. Likewise, loans and advances to the commercial banks cannot exceed six months.² Thus the commercial banks must approach the Bank regularly not only to increase their indebtedness, but also to roll over their outstanding debt. This tends to give a certain amount of automatic flexibility to the money supply, since the commercial banks could, during periods of slack credit demand, reduce their indebtedness to the Bank. But even more important, this situation gives the Bank of Sudan as much control over bank reserves and credit conditions as has a central bank conducting regular open market operations in a highly

¹Dorrance, loc. cit., p. 278.

²Bank of Sudan Act, 1959, sec. 41.

developed money market. Dorrance suggests that this may even be superior to open market operations, since "it need not lead to counter-vailing speculative reactions by the community and it is , by itself, independent of the fiscal and other requirements of a developing country."¹ To these might be added a third advantage. Since each commercial bank must approach the Bank of Sudan individually, the Bank is in a position to wield a great deal of influence over the policies of all the banks. In the past the Bank has used this power by discriminating among the types of bills presented for discounting.² This tends to be inefficient, since the proceeds obtained by rediscounting a loan made to an exporter, for example, do not have to be reloaned to an exporter. They may just as easily be loaned to an importer or any other class of borrower. But the Bank can influence the lending policies of the commercial banks by suggesting to them that the availability of credit to any bank will be affected by the extent to which the bank has expanded, or reduced, any category of loans in its portfolio.³ The positive aspect of such a policy would be effective only to the extent that each bank found an effective demand for the type of loans the central bank wished to promote. Given this condition there could be some measure of success.

¹Dorrance, loc. cit.

²Bank of Sudan, Annual Report, V (1964), 37.

³The Federal Reserve System in the United States implemented such a policy for a brief period in 1966. Federal Reserve Bulletin, LII (September, 1966), 1338-39.

This serves to emphasize one major difference between open market operations and central bank lending as a means of affecting commercial bank reserves. In the former case, the central bank does not deal with the banks at all, and the extent to which any individual bank benefits or is hurt by the policies of the central bank will depend on the competitive position of the bank in the economy. But in the latter case, the central bank must deal with each bank individually, and the extent to which each bank benefits or is hurt by the monetary policy of the moment can be traced directly to the central bank. This leaves the central bank open to charges of discrimination or favoritism, charges to which the Bank of Sudan is particularly vulnerable since it has openly promised to assist one commercial bank in the country and is a major shareholder of another commercial bank.¹ While this may appear to be a small point, the Australian experience suggests that it may be an important factor in the operation of monetary policy:

The hiving off from the central bank of its commercial banking operations has removed a lasting source of friction and mistrust in relations between the central bank and the private banks, and this factor is doubtless partly responsible for the quite astonishing change, over the ten years to 1965, in the attitude of private bankers towards the central banking authorities.

Where resentment and suspicion of motives and actions made themselves evident there has developed a high degree of material understanding, confidence and cooperation.²

¹See above, pp. 18-19.

²W. F. Crick, "Australia Presses On: Ten Years of Solid Advance," The Three Banks Review, No. 71 (September, 1966), pp. 19-20.

A further difference between open market operations and central bank lending as methods of monetary control is that the former has greater expansionary power than the latter. Open market operations, because they are taken at the initiative of the central bank, leave the commercial banks with excess reserves on which they are paying interest and thus gives them more incentive to increase loans or to purchase securities than they would have if they were merely faced with the opportunity of acquiring excess reserves. Insufficient monetary expansion, however, is not likely to present major problems in the Sudan.

Despite these disadvantages, lending by the Bank of Sudan to the commercial banks was the most convenient, and under the circumstances probably also the most effective, method of controlling credit conditions and it was used actively. Since for the three years prior to the opening of the central bank the economy was under a currency board regime where any increase in the money supply was dependent upon an equal increase in foreign exchange reserves, the initial problem seemed to involve raising over-all liquidity. At any rate the Bank of Sudan adopted a very easy attitude during its first few years of operation. A recent annual report described the general policy this way:

Equilibrium within the private sector assumed that any internal borrowing by private enterprises and individuals would be offset by monetary savings of other enterprises and individuals. In a fast growing economy, in which increased numbers of producers previously engaged in subsistence activities begin

to take part in monetary transactions, there is a need for an increasing supply of monetary media both in the form of currency and bank balances. The increased holdings of monetary media represent a form of saving on the part of the holder. This saving can serve as a basis for credit expansion offsetting, as it does, the inflationary impact of the latter. Thus the conditions for equilibrium of the private sector, formulated in the 1962 Report assumes the possibility of the expansion of bank advances within the limits of the increase in holdings of money and quasi money.¹

The Bank encountered few problems in implementing this policy. After hesitating briefly the commercial banks greatly expanded their borrowing from the central bank, and their own loans to the public grew apace. Between the end of 1960 and the end of 1965 the money supply rose from £S. 37.1 million to £S. 61.8 million, an increase of 66 per cent over the five years.² Not all of this can be attributed to the Bank of Sudan. Table 7 on the following page, which shows the broad sources of changes in the money supply, indicates that a large and continuous deficit in the public sector's transactions with the banking system - - including the central bank - - was the major influencing factor for the period as a whole. This deficit consisted mainly of running down Government balances with the Bank of Sudan, although to a lesser extent it included a decline in balances with the commercial banks and a rise in borrowing from the central bank.

¹Bank of Sudan, Annual Report, IV (1963), 13.

²International Monetary Fund, International Financial Statistics, Supplement to 1966/67 Issues, pp. 232-33.

Table 7
Major Sources Of Change In The Money Supply 1961-65^a

	Change As Of June 30 Each Year				
	1961-62	1962-63	1963-64	1964-65	1961-65
	----- fS. Millions -----				
1. Net Foreign assets ^b	-7.13	-4.09	-19.31	- 4.74	-35.27
2. Public sectors' position with banking system ^c	+8.11	+5.69	+20.22	+22.89	+56.91
3. Commercial bank advances to private sector	+9.13	+6.61	+ 7.78	-11.68	+11.84
4. Unclassified items (net liabilities) ^d	-2.60	-0.79	- 3.27	- 2.88	- 9.54
5. Money Supply	+7.51	+7.42	+ 5.42	+ 3.59	+23.94

^aSource: Bank of Sudan, Annual Report, V (1964), and VI (1965).

^bExternal reserves held by the Bank of Sudan, net bilateral claims and net external liabilities of the commercial banks.

^cChange in assets (currency and deposits) minus change in liabilities (loans or other financial obligations). Net increase denoted by (-).

^dIncludes capital, reserves and miscellaneous accounts of the banking system.

The monetary effect of the change in the Public sector's position was partially offset by a decline in foreign exchange reserves. Since the reserves were held by the Bank of Sudan and were exchanged for local currency, their decline marked a drainage of cash from the economy. On the other hand, bank advances to the public rose strongly in every year but 1964-65, adding some expansionary force to the money supply. To some extent this increase in bank lending was made possible by the rise in reserve money resulting from the public sector's deficit with the

Bank of Sudan.¹ But the banks also financed their lending by running down their reserves and by borrowing from the Bank of Sudan.² In future any increase in commercial bank lending should be even more dependent on these latter two sources of finance since the Government has reduced its balances with the central bank to a minimum, and has at the same time almost reached the statutory limit of its borrowing capacity with the central bank.

Mr. Salah Jawhari has charged that the Bank's loose monetary policy during the period 1960-1962 resulted in an excessive increase in the money supply and a rise in prices in the Sudan.³ The gist of Mr. Jawhari's analysis is contained in Table 8. From the data in the table Jawhari concludes:

Between 1960 and 1962, the cost of living rose by an average of 2.8 per cent per year, and the annual excess increase in the supply of money was approximately 2 per cent per year, due mainly to the extension of bank credit in 1960 to the private sector. Almost all the rise in the cost of living index during this period was due to a rise in the prices of locally produced food, and, therefore, it must be inevitably concluded that the excess increase in the supply of money, resulting from over-expansion of commercial bank credit to the private sector,

¹ The term deficit is used here to include the decline in public sector deposits with the Bank of Sudan, as well as the rise in public sector borrowing.

² See Figures 7 and 8 above, pp. 56 and 60.

³ Salah F. Jawhari, loc. cit., pp. 79-94.

Table 8
Monetary Analysis 1960-62^a

	Increase In Real Income £S. Millions	Income Velocity Of Money	Required ^b Increase In Money Supply - - £S. Millions - -	Actual Increase In Money Supply	Excess ^c Increase In Money Supply - - - Per Cent - - -	Increase In Cost Of Living - - -
1960	27.40	6.70	4.09	5.80	3.8	0.87
1961	7.17	6.96	1.03	-0.60	-3.2	6.90
1962	41.47	6.63	6.25	8.80	6.1	0.56
Average	24.98	6.76	3.79	4.67	2.2	2.8

^aSource: Salah Jawhari, "The Recent Trend in the Development of Banking in the Sudan", Middle East Economic Papers, X (1963).

^bThe "Required" increase in the money supply is that needed to finance the increase in real income in year t at the average income velocity of money which post hoc observation shows to have prevailed during period t; after adjustment for the release of money or absorption of money (if any) resulting from the change in observed income velocity of money between periods t-1 and t; but without any adjustment for the release of money or absorption of money (if any) resulting from the change in the level of prices between period t-1 and t.

^cThe "excess" increase in the money supply is the actual increase less the "required" increase.

was wholly responsible for the rise in the cost of living index.¹

This conclusion, of course depends on the assumptions that the income velocity of money in the Sudan is determined independently of the volume of money, that price increases are solely the result of excessive money, and that any "excess" money must drive up prices. Yet Table 8 shows that prices rose when there was no excess increase in the money supply and excessive increases in the money supply were not accompanied

¹Ibid., p. 92.

by equal increases in the price level. In 1961, when prices increased by 6.9 per cent, the increase in the money supply was deficient by 3.2 per cent, while in 1962, when the excess increase in the money supply was 6.1 per cent, prices rose only 0.6 per cent. Thus there is little evidence to support the view that price increases during the period were directly related to excess increases in the money supply. It seems more likely that the large price increase in 1961 was the result of some autonomous factor, possibly a poor food crop,¹ and that because of the decline in the money supply that year the income velocity of money was pushed up. The following year pressure by the public on the commercial banks and by the commercial banks on the Bank of Sudan resulted in a large increase in the money supply which enabled the income velocity to fall to a more normal level.

By the middle of 1963 the monetary authorities had become worried about the rapid increase in the money supply and the decline in foreign exchange reserves. Much of the pressure emanated from the public sector but the private sector had become extremely liquid and

¹The Republic of the Sudan, Ministry of Finance and Economics, Research and Statistical Section, Economic Branch, Economic Survey 1963, pp. 36-37 and Appendix Table 5, suggests that the cost of living index for lower salaried Sudanese is extremely sensitive to changes in the wholesale price index for food, drink and tobacco, which in turn largely reflects changes in the price of dura.

foreign exchange earnings were declining despite substantial increases in exports. In the last quarter of 1963 the Bank of Sudan took steps to reduce the threat of inflationary pressure, although the extent to which it could act was limited by the heavy seasonal demand for loans by exporters.

In the first instance, the lending policy of the Bank became more restrictive. Banks which approached the upper limit of their credit ceiling were refused increases in credit facilities, and more selective control was exercised over bills presented for discount. These actions raised fears that quantitative restrictions would be placed on imports, since in previous years that had been the Government's reaction when foreign reserves fell dangerously low.¹ As a result there was a surge in demand for imports, commercial banks' loans to importers rising from £S. 6.7 million to £S. 12 million between the end of September and the end of December, 1963, while actual imports - - excluding Government direct purchases - - climbed 12 per cent during this period to £S. 17.6 million. Total bank advances during that period rose by £S. 10 million, the balance of the increase going to finance exports. Commercial bank liabilities to the Bank of Sudan rose only slightly at that time to £S. 8.2 million from £S. 7.6 million, and the banks' reserve ratio declined to 11 per cent from 19 per cent. Such an extensive drop was possible

¹Mahhouk and Drees, loc. cit., pp. 162-169

because the Bank of Sudan had not exercised the power given it by the Bank Act to fix a legal reserve ratio and this dramatizes the danger of permitting the legal reserve ratio to remain substantially below the actual reserve ratio maintained by the banks. Had the Bank of Sudan fixed the legal reserve ratio at the 20 per cent maximum allowed under the Bank Act in 1960, when the banks were maintaining much higher reserves, and then refused loans on rediscounts to any bank whose actual reserves were more than a small percentage above the legal ratio, it would have had more control over bank lending during this period.

Early in 1964, deposits of the Gezira Board - - a Government institution - - were transferred from the commercial banks to the central bank, putting further pressure on the reserve ratio which fell to 8.8 per cent in March of 1964, and would have fallen further had there not been an increase in commercial bank indebtedness to the central bank. To ensure adequate financing for exports the Bank agreed to make advances for this purpose over and above normal credit lines. Loans to importers continued to rise until March, while export loans did not reach a peak until June, but total bank advances outstanding declined from January onwards, only moving up temporarily at the end of the second and fourth quarters when loans to exporters increased seasonally. By the end of 1964 deposits had edged down a little further from their low March level, bank borrowing was down somewhat from a mid-year peak,

bank reserves were little changed and the reserve ratio had eased to 9.2 per cent from 10.8 per cent at the end of 1963.

Despite the pressure emanating from the Bank of Sudan, the commercial banks increased their lending for crop cultivation and long-term capital investment during 1964, two categories of loans in which they had previously shown little interest. The 18 per cent increase in the former to £S. 864 thousand and the 52 per cent increase in the latter to £S. 2.5 million, while small in absolute amounts, would suggest that the banks did not feel too pinched, particularly during the second half of the year when most of the increase occurred. It should further be noted that all of the decline in bank deposits during 1964 was attributable to the public sector, while private deposits actually rose by £S. 1 million to £S. 28.2 million. This, however, represented a slower rate of growth than the gain of £S. 4.6 million during 1963.

In assessing its monetary policy of 1964, the Bank of Sudan said:

These restrictions contributed to the fall in advances for financing imports in 1964 and may have played a part in stopping the expansion of advances for purposes other than financing exports and imports. To the extent that the restrictions did affect advances for the financing of imports they thereby caused a reduction in the flow of imports which, in view of the declining demand in the economy, would have been in excess of current requirements. The final effect of the policy was therefore, to provide a measure of protection to the foreign exchange reserves and to prevent an undue accumulation of stocks of imported goods without creating any shortage of such goods on the domestic market.¹

¹Bank of Sudan, Annual Report, VI (1965), p. 39.

In an effort to substantiate the Bank's claims, Figures 9 to 12 were prepared showing the year-on-year change in the cost of living index, imports, bank advances, and the money supply on a quarterly basis for the years 1963 to 1965. The year-on-year comparison was chosen because it eliminates seasonal fluctuations, although it can also, in some circumstances, give a misleading picture of current trends. At first glance the data seems to bear out the assessment made by the Bank; three of the four indicators were lower at the end of 1964 than a year earlier, while the percentage increase in the money supply at the end of 1964 was about half that of a year earlier. The rise in the rate of increase in imports during the first half of 1964 probably reflected heavy ordering late in 1963, but the more rapid increase in the cost of living index is not so easily explained in view of the sharp drop in 1963. Some of the gain might be accounted for by the increase in tariffs towards the end of 1963 but this would not account for all of it. It is possible that importers, expecting a shortage of imported goods, raised prices but then were forced to rescind the increase in the face of lower demand. The slack demand, it should be noted, was the result of a 36 per cent drop in the 1963-64 cotton crop, harvest of which began in January 1964. But if the drop in cotton output was responsible for the decline in the cost of living index, it could also be responsible for

SELECTED INDICATORS

Percentage Change From Year Earlier Quarter, 1963 to 1965

Figure 9
COST OF LIVING

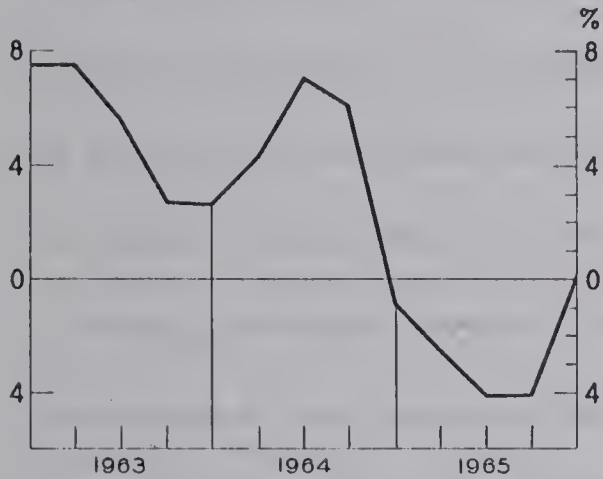


Figure 10
BANK ADVANCES

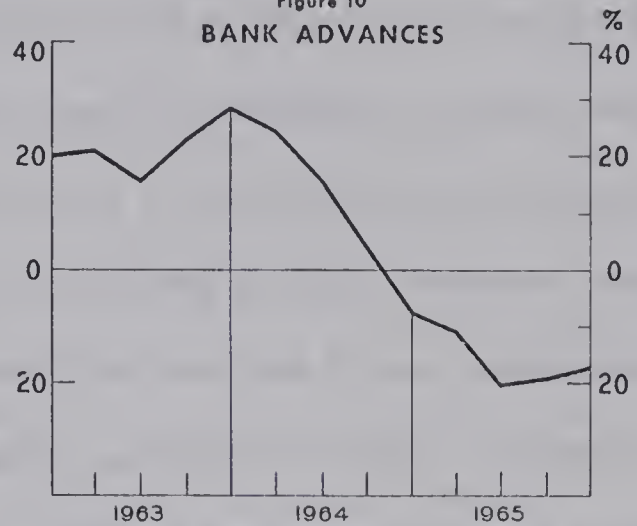
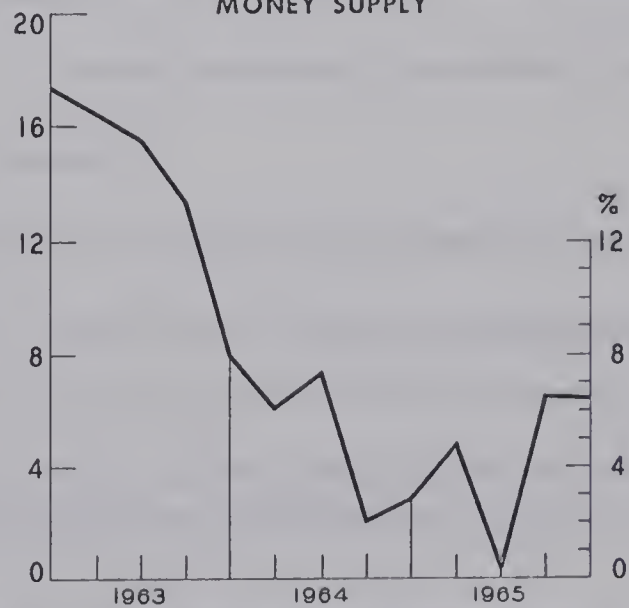


Figure 11
IMPORTS



Figure 12
MONEY SUPPLY



Source: International Monetary Fund, International Financial Statistics, XX, No. 6 (June, 1967), and Supplement to 1966/67 Issues.

the drop in the other indicators and the slower growth in the money supply.¹

Without becoming embroiled in an argument over the extent to which credit for a decline in demand should be shared between the Bank and the cotton crop, it is possible to question whether the direct attack on imports by the Bank was the best way to protect foreign exchange reserves. There is no reason for suspecting that the decline in foreign exchange reserves between 1961 and 1963 was due to any fundamental imbalance in the exchange rate which prevented the Sudan's exports from competing in world markets. Nor, for the three years as a whole, was there a sharp but temporary drop in export receipts; total exports dipped £S. 2.7 million in 1961 but rose by £S. 24.2 million over the next two years. All indications suggest that the economy was suffering from excess demand, the result of a rapid increase in the money supply and a high level of government spending.²

Under these circumstances, limiting imports directly merely adds to the inflationary pressure. The proper remedy would have been

¹Mahhouk and Drees, loc. cit., found a very close correlation between exports in one year and imports the following year in the Sudan.

²"The increased demand for credit by the private sector was, in part, the function of rising economic activity, caused by the high rate of Government spending." Bank of Sudan, Annual Report, IV (1963), p. 39.

a general tightening of credit conditions, including a rise in interest rates, aimed at reducing the over-all level of demand. If, in addition, selective controls were deemed necessary, they should have been aimed at those sectors where they could best affect aggregate demand: loans to finance retail sales of imports and long-term loans for capital investment. While the former category of loans did drop about £S. 400 thousand during 1964, the latter category rose by £S. 900 thousand. The Bank would undoubtedly support its choice of policies by stating that it had to maintain adequate financing for exports. If it was indeed the case that there was insufficient financial slack in the economy to finance the flow of exports without monetary expansion, this is an even stronger argument for increases in interest rates.

Ronald Soligo, in a discussion of monetary policy in Pakistan, stated:

There is some doubt that contraction of bank credit to the private sector would have brought about the desirable effect of reducing private effect/sic demand and easing the pressure on prices arising from government borrowing from the banking system. In an underdeveloped economy, markets and institutions which would transmit the effects of reduced credit to the private sector throughout the rest of the economy do not exist in any important sense. To the extent that those engaged in manufacturing and commerce are also consumer and investors, or to the extent that credit from the unofficial or unorganized market is substituted for bank credit, reduced lending by the commercial banks will reduce private effective demand. However, for the purpose of financing inventories, decreasing one's own expenditures or borrowing in the unofficial markets are not good substitutes for loans from the commercial banks. Hence one result of decreased bank lending

to the private sector would be reduced imports and excess capacity in the manufacturing sector - in other words, additional upward pressure on prices.¹

Superficially this is a persuasive argument. If it were sustainable it would probably evoke sighs of relief not only from the central bankers of Pakistan but also from those of the Sudan and most other underdeveloped countries, since they would be freed from any responsibility for inflation and any obligation to restrain the growth of credit. But one is disturbed by the conclusion that money doesn't matter, or worse, that lack of money must result in inflation. Further examination of the argument suggests that Mr. Soligo's error lies in assuming that since he cannot trace the mechanism through which contraction of bank credit reduces effective demand, no such mechanism exists. In fact, it seems clear that in the situation described by Mr. Soligo money wages would almost certainly rise more slowly than prices, real incomes would fall and the inflationary pressure would ease.

In summary, the Bank of Sudan has been given the normal duties of a central bank, and has been given a wide range of powers to enable it to carry out these functions. In practice, while the Bank's ability to use

¹ Ronald Soligo, "Monetary Problems of Pakistan," A Paper Presented to the Conference of University Professors, the American Bankers Association, Princeton, New Jersey, Session VII, September 19, 1966.

some of the more conventional tools of monetary control are limited by technical conditions in the Sudan, its powers are wide enough to enable it to improvise and apply a number of less conventional tools. While the latter may be less efficient than the former, they would, if the need arises, enable the Bank to carry out its duties. In the words of Edward S. Shaw, "It is not a good excuse for excess (or insufficient) money that conditions are technically inappropriate for the Federal Reserve triumvirate."¹

Monetary conditions in the Sudan were further complicated by large Government sector deposits with the central bank, the result of crediting the Government account at the central bank with the value of external assets taken over when the Bank commenced operations. These deposits totalled £S. 25.2 million at the end of February 1960, compared with total foreign exchange reserves at that time of £S. 47.3 million, currency in the hands of the public plus private bank deposits of £S. 34.4 million, and a Government budget for fiscal 1959-60 of £S. 42.8 million. In retrospect, it would have been more sensible to credit the major part of the Government's external assets into the capital account of the Bank, leaving only an adequate working sum on deposit. Not only would this

¹Edward S. Shaw, "Comments on 'Monetary problems of Pakistan,'" Conference of University Professors, The American Bankers Association, Princeton, New Jersey, Session VII, September 19, 1966.

have forced the Government to adopt a more realistic attitude towards budgeting during the following five years, it would have given the central bank a firmer grip on monetary conditions. By the end of 1965, however, the deposits had been dissipated and the Government had almost reached the end of its legal borrowing rights with the central bank. Providing the Bank of Sudan does not allow the commercial banks to exchange excess reserves for Government bonds and bills without curtailing lending to the private sector, and assuming the Government does not change the section of the Bank Act which limits its borrowing from the Bank of Sudan, the problem should be solved.

Despite these problems the Bank of Sudan proved, during 1964, that it had control of monetary conditions in the country. There is some doubt as to whether, in the light of general economic conditions, the Bank adopted the proper policies, but there can be no doubt of the Bank's ability to carry out the necessary policies. Nor can there be any question that the proper monetary policies can curb inflation. The question which remains unanswered is the extent to which financial policies and conditions can influence economic development; that is the subject of the following chapter.

CHAPTER V

FINANCE AND DEVELOPMENT

The central banks in most newly self-governing countries may be in part a symbol of the nation's independent status; they may also be useful, if expensive and not absolutely necessary, institutions for carrying out certain functions in the sphere of money and banking; but some of the newer central banks probably represent, at least in the minds of their founders, a means of promoting rapid economic growth. For example the President of Tanzania said, on the opening of that country's central bank, "The Board and staff of the Bank of Tanzania are embarking on a very important job. They are to see to it that we get the money we need for our daily use and for development, and that our money is so managed that it will foster rapid growth of the economy in real terms. . . ."¹

Since the central banks of the more developed countries have been used to regulate, with varying degrees of success, the rate of growth of their respective economies for the last quarter century or more, it is understandable that the less developed countries expected a domestic central

¹Extract from a speech made June 14, 1966 by H.E. the President of the United Republic of Tanzania Mwalimu Julius K. Nyerere at the opening of the Bank of Tanzania, reprinted in East African Currency Board, Report for the year ended 30th June 1966, p. 119.

bank to speed the growth of their economies.

To some extent it is probably true that a central bank can speed the growth process, although there are divided views on how this will be effected. There does, however, seem to be a general consensus of opinion that most underdeveloped countries will require monetary policies substantially different from the easy money, low interest rate remedy usually prescribed for a developed economy in a state of recession or depression. The International Monetary Fund summarized an extensive body of writing in these words:

In the search for rapid development, it is sometimes thought that expansionary credit policies can markedly accelerate the pace of development. In the developed countries, the expansion of output that can be obtained by resort to an easy credit policy is limited; in the less developed countries, the corresponding limits are even narrower. In general, the developing countries have relatively low incomes and consequently a limited capacity for savings. They have also a relatively undiversified and inelastic productive system that responds only slowly to demands created by an active credit policy. In these circumstances, the monetary authorities are constantly reminded of the line between inflation and loss of international reserves on the one side and a slow rate of growth on the other, particularly in economies where a considerable part of consumption is provided through imports, and where increases in consumption tend to be promptly reflected in the balance of payments position.¹

¹International Monetary Fund, 1966 Annual Report, p. 28. Some of these ideas are also discussed by V.K.R.V. Rao, "Investment, Income and the Multiplier in an Underdeveloped Economy," The Economics of Underdevelopment, ed. A.N. Agarwala and S.P. Singh (New York: Oxford University Press, 1963), pp. 205-18; Henry J. Bruton, "Growth Models and Underdeveloped Economies," ibid., pp. 219-41; "The Multiplier Process in an Underdeveloped Economy," State Bank of Pakistan Bulletin, (June, 1957), pp. 12-24; and Bottomly, loc. cit.

The major physical impediments to increasing output in the Sudan are the lack of unused capital stock and the shortage of savings to finance additions to the nation's capital.¹ Thus the type of monetary policy that will best promote economic growth is a policy which will lead to higher rates of saving and investment and to more effective investment. There are varying views concerning the extent to which a central bank can promote these goals.

Howard Ellis, for example, claims that "When we have covered the aims of promoting a free -enterprise economy, securing full employment, and maintaining price stability, we have exhausted the contributions of general monetary policy to progress."² But Xenophon Zolotas, envisages a more forceful role for central banks in developing countries.³ He feels that in addition to regulating the liquidity of the economy the central bank should be directly concerned with (1) maximizing the volume of private savings directed into controlled channels such as banks and the capital market; and (2) promoting the optimum allocation of savings so as to provide for the

¹There may be other bottlenecks, social, educational and political, but the elimination of these is outside the scope of the central bank.

²Howard S. Ellis, "Limitations of Monetary Policy," Readings in Money, National Income and Stabilization Policy, ed. Warren L. Smith and Ronald L. Tiegen (Homewood: Richard D. Irwin, 1965), p. 385.

³Xenophon Zolotas, "Monetary Planning in Economic Development," Banker, CXVII (July, 1967), 605-609.

needs of development - promoting sectors while containing the excessive expansion of activities making a small or negative contribution to economic development.¹ To these Mr. Patrick would add that the central bank should attempt to increase the rate of saving and investment.²

The value of an increase in the rate of saving is obvious. But it is also clear that unless this saving is held in monetary form, i.e. as currency or some other type of financial asset, the benefits will be limited. Mr. Patrick points out that a large proportion of tangible wealth in underdeveloped countries is held in the form of precious metals and excess holdings of inventories.³ If spending on these types of assets is increased at the same time that current consumption is reduced, no resources are freed for investment. Only if current saving can be channeled into financial assets can there be an increase in the rate of investment and an increase in the rate of growth. Growth could be further speeded if individuals could be persuaded to reduce their holdings of real assets other than capital goods and increase their holdings of financial assets. The

¹Ibid., pp.

²Hugh T. Patrick, "Financial Development and Economic Growth in Underdeveloped Countries," Economic Development and Cultural Change, XIV (January, 1966), 174-89.

³Ibid., p. 279.

resources released then could be transformed into productive capital goods either via the foreign trade route or as consumer goods for the workers who produce the capital goods. Patrick feels that output could be raised by 10 per cent this way in many countries although it would be rash to suggest that this estimate is accurate for the Sudan. But even if the Sudan were not able to transfer existing stocks of wealth into more productive forms, it is still advantageous to take whatever steps are possible both to increase the rate of saving and to increase the flow of new saving into controlled channels.

To some extent the methods which will best attract savings into organized channels will have to be tailored to conditions in each country. The central bank of Greece was able to reduce private hoarding of gold by offering to sell gold sovereigns in an organized market; backed by proper monetary and fiscal policies this created sufficient confidence in Greek currency that savers turned from gold to interest bearing securities.¹ This step may be a little too bold for the Sudan, not only because the Sudanese currency has yet to establish a record of stability, but also because the measure requires a level of sophistication in monetary matters that may not exist yet among savers in the Sudan.

¹Xenophon Zolotas, "The Gold Hoarding Problem," Banking, A Financial Times Survey (London: May 22nd, 1963), p. 63.

There are, however, other steps that the Bank of Sudan can take towards this goal. One is to assist the commercial banking system in providing as wide a coverage as possible throughout the country. In view of the low density of population in some areas and the low level of incomes it is uneconomical for the commercial banks to set up a complete network of branches all over the country. But the Bank of Sudan has branches in areas not served by the commercial banks.¹ As a service to these communities it accepts private deposits. A better solution might be for the Bank to offer to share its facilities in those areas with one of the commercial banks. If the arrangement were made on the basis of a tender or auction, the winning bank would have some incentive to promote the banking habit among the inhabitants of the area in order to get the best return possible on its investment. An extension of this principle would be for the Bank of Sudan to establish banking facilities in areas served neither by itself nor by the commercial banks and to rent the facilities to one of the commercial banks, the rental to be fixed by tender. Even were the Bank of Sudan to lose money on such an operation, the country as a whole might gain either through an increase in saving or a rise in the flow of saving into controlled channels. A policy such as this was apparently followed by the State Bank of Ethiopia.

¹See above, p. 18.

Branches were opened in some areas of Ethiopia although they were not expected to operate immediately on a profitable basis. The prime reason for doing this was to insure a smooth distribution of currency to the distant parts of the country, in order to broaden the money economy, and to educate the public into banking habits.¹

Patrick suggests that the development of a wide range of financial institutions "not only accomodates but even induces growth, by generating incentives to savers to increase their rate of saving, to entrepreneurs to invest more, and to producers to work harder."² He suggests that the needed institutions will spring up eventually, once the demand for their particular services has grown strong enough. But, he contends, if the monetary authorities encourage and even subsidize a wide variety of financial markets and institutions, so that their formation occurs earlier than would otherwise be the case, then the very existence of the institutions will speed the growth of demand for their services and speed the growth of the economy.

Mr. Patrick does not present any empirical data to support this intriguing theory and, judging from the experience of some countries where such a process has been attempted, he may be overly optimistic.

¹Z.A. Konczacki, "Currency and Banking in Ethiopia," *The South African Journal of Economics*, XXX (September, 1962), 209.

²Patrick, loc. cit., p. 185.

In India, for example, the central bank actively assisted and in some cases even organized at least six types of credit institutions.¹ There was no increase in the flow of savings and "the Reserve Bank has had to sustain both the short-term and longer term credit institutions with created moneys."² In the Sudan the creation of the Agricultural Bank did not contribute any additional credit to that sector; the proportion of total credit going to agriculture has fallen from the level attained immediately prior to the establishment of the Agricultural Bank.³ This does not mean that there is no merit in a "supply leading approach" to the development of financial services, but such a policy must, as Mr. Patrick himself admits, "be handled warily and cautiously."⁴

Since the Sudan is already served by the major classes of financial institutions, including banks, development banks, credit unions, and insurance companies, it might be more beneficial to attempt to increase the efficacy of these existing institutions rather than to promote new institutions. In this respect it should be noted that the non-bank financial institutions in many countries owe their success to legal

¹M. Narasimham, "Central Banking in India," The Bankers Magazine, No. 1471 (October, 1966), pp. 263-71.

²Ibid, p. 271.

³See above, pp. 42-43.

⁴Patrick, loc. cit., p. 186.

restraints placed on the banks, rather than to some natural superiority over the banks.¹ It has been suggested earlier that the development banks in the Sudan might be better able to accomplish their goals if they attempted to mobilize private savings rather than depend on the public sector for funds.² One also suspects that the commercial banks would be more useful if inter-bank competition were not restricted by the existence of the Sudan Banker's Association. "The main objective of the Association is to limit harmful competition amongst banks by the agreement of all members to apply in their dealings a 'Tariff Agreement' which sets out maximum rates payable on deposits and minimum charges and commissions for services rendered."³ If the existence of the Association reduces the influence of market forces in setting the price of loanable funds, and it is reasonable to assume that such an institution will be less sensitive to market forces than individual banks, there is likely to be a misallocation of resources.

¹See references to the institutions called *Financieras* in (1) Raymond W. Goldsmith, The Financial Development of Mexico, (Paris: Development Centre of the Organization for Economic Cooperation and Development, 1966), pp. 24-6; and (2) Julio Gonzalez Del Solar, "The Argentine Banking System, Bank of London and South America Quarterly Review, VI (November, 1966), 165-66; as well as comments on the rapid growth of the trust companies in Canada in Report of the Royal Commission on Banking and Finance, (Ottawa: 1964), pp. 198-99.

²See above, p. 45.

³Bank of Sudan, Annual Report, I (1960), 30-31.

There is some uncertainty as to the role of interest rates in adjusting the over-all rate of savings. According to a recent O.E.C.D. report on savings and capital markets:

Most of the experts agree that the distribution of financial saving can be modified by relative changes in rates. But they are much more sceptical of the possibilities of influencing the over-all volume of savings by means of variations in the average rate of return. There are reasons for thinking that this effect is possible, but empirical studies made on the elasticity of saving in relation to yield have not resulted in conclusions which can be regarded as certain and general. One view frequently expressed is that there are nevertheless limits beyond which elasticity is shown. These limits relate either to the rates themselves (slight variations are without effect, but large variations can have an effect) or to the category of saver (some savers react more to yield considerations) and sometimes to the category of investment.¹

But even if there is no reason to suppose that a change in interest rates will have any significant effect on the total volume of saving in the Sudan, and this is by no means certain, the level of interest rates will undoubtedly have some effect on the amount of savings held in the form of financial assets and on the type of financial asset which will be held. Richard Porter argues that in order to sell government securities in economies with narrow financial markets, the yield differential between the securities and more liquid assets must be great enough to compensate savers for the risk of being unable to sell securities when they want to;

¹Organization For Economic Co-operation and Development, Committee For Invisible Transactions, Capital Markets Study, Vol. I: General Report (Paris: 1967), p. 125.

if this condition does not hold, the market for government securities will be limited to financial institutions which can expect to hold the securities to maturity.¹ This would appear to be the case in the Sudan. Table 9 below shows the distribution of a ten year, 5 per cent Government bond issue at the time of allotment in January, 1965 and at the end of 1965. Although the 5 per cent rate offered on the bonds was well above

Table 9

Distribution Of A £S. 1 Million, 5 Per Cent Government
Stock Issue At Time Of Allotment In January,
1965 And At The End Of 1965.^a

Type Of Holder	Proportion Of Total Issue Held By Each Class Of Holder In:	
	January, 1965	End Of 1965
	- - - - - per cent - - - - -	
Insurance Companies	14.7	33.1
Pension/Provident Funds	7.5	7.6
Blocked Funds	10.5	13.4
Companies	5.8	5.8
Private Subscribers	4.2	4.5
Bank of Sudan	57.3	35.6
Total Issue	100.0	100.0

^aSource: Bank of Sudan, Annual Report, VI (1965), pp. 41-42.

¹Richard C. Porter, "Narrow Security Markets and Monetary Policy: Lessons From Pakistan", Economic Development and Cultural Change, XIV (October, 1965), 48-56.

the 2 per cent rate paid on bank deposits, the differential was not great enough to attract companies and private subscribers. One year after the date of issue, these groups held only 10.3 per cent of the bonds worth only £S. 103 thousand. On the same date these two groups held savings deposits of £S. 4.051 million.

Mr. Mead would argue that the form which saving takes, whether long term financial assets, short-term financial assets or cash hoards, is unimportant. "The saver. . . has added more to the product of the country (his income) than he withdraws (his consumption spending); the surplus is available for investment purposes."¹ This attitude ignores the institutional problems which exist in the Sudan. It was pointed out in a previous chapter² that the commercial banks in the Sudan are reluctant to make long term loans for capital investment and it was suggested that investors would have to rely mainly on the development banks for funds. Up to now the development banks have obtained their loanable funds from the Bank of Sudan or from the Government (which in turn borrowed from the Bank). It is likely that in the future the development banks will have to obtain a large part of their funds from the general public, either by accepting deposits and selling debentures or by selling the financial assets they have received from borrowers, if they are to fulfill the roles assigned

¹Donald C. Mead, "Saving, Investment and the Analysis of Growth", Economic Development and Cultural Change, XII (October, 1963), 84-86.

²See above, Chapter III.

them in the development of the country. In order for them to do this the Bank of Sudan will have to create a suitable financial climate which, of course, includes a suitable structure of interest rates.

Interest rates will also play a more direct role in the Bank of Sudan's program to ensure that loanable funds are directed to those ends which best promote development. While the Bank has the power to regulate directly the amount and types of loans made by the commercial banks, there is general scepticism as to the efficacy of such controls.¹ On the other hand, recent experience in some of the Eastern European countries suggests that a rise in interest rates is an effective way of reducing undesirable investment.

The new policies have had the immediate effect of reducing plant inventories (not many months ago argued by plant managers to have been held at rockbottom levels) - just as the introduction of a charge on fixed capital suddenly revealed that factories could relinquish a considerable quantity of machinery and equipment kept as a safety margin as long as capital was a free good.²

This was the result of a rise in interest rates from a level of 1-2 per cent, much lower than rates which currently prevail in the Sudan. It might reasonably be argued that once short-term rates have reached the 7-8 per cent level which prevails in the Sudan, inventories would be reduced to near minimum levels so that any further rise in rates would

¹See above pp. 58-59.

²George Garvy "Banking and Credit in the Framework of New Economic Policies in Eastern Europe," Banca Nazionale Del Lavoro Quarterly Review, No. 78 (Sept. 1966), p. 249.

have little effect. It should, however, be noted that during periods in 1963-64 the year-on-year increase in the cost of living was close to 8 per cent,¹ thus reducing the real rate of interest to 1-2 per cent.

One argument against higher interest rates in developing countries is the suggestion that the higher cost of funds may drive some prospective borrowers with worthwhile projects out of the market. While this may, indeed, be the case, it is just as likely that because of the scarcity of real capital in the Sudan profitable investment projects will exceed the free resources of the economy at all but the most exorbitant interest rates. The data in Table 10 tends to confirm this. All of the loans granted or approved by the Industrial Bank of Sudan have an amortization period of 10 years or less. Furthermore, loans amounting to £S. 431.7 thousand, or 61 per cent of the total, are amortized in 7 years or less. It would require extremely large changes in interest rates to affect such projects.

One source of financing for development projects which must be considered is the Bank of Sudan itself. This type of financing involves some disadvantages, which are discussed below. Equally important, the extent to which such financing can be used is limited and the limits are fairly low. Johnson points out that the amount of development spend-

¹See Figure 9, p.74 above.

Table 10
Amortization Period of Loans Approved and/or Granted by the
Industrial Bank of Sudan^a

Amortization Period Years	Projects Completed		Projects Approved		All Projects	
	Number of Loans	Value of Loans £S.'000s	Number of Loans	Value of Loans £S.'000s	Number of Loans	Value of Loans £S.'000s
2½	..	..	1	5.0	1	5.0
3	1	1.3	6	26.2	7	27.5
4	2	6.6	2	9.0	4	15.6
5	4	116.0	2	14.1	6	130.1
6	4	49.8	5	51.2	9	101.0
7	..	..	2	152.5	2	152.5
8	1	13.5	2	126.2	3	139.7
10	1	35.8	2	100.2	3	136.0
Total	13	223.0	22	484.4	35	707.4

^aSource: Industrial Bank of Sudan, Annual Report of the Board of Directors for the year 1964, pp. 17-19.

ing as a proportion of national income which can be financed by non-inflationary increases in the money supply will equal the product of the rate of increase in the demand for money, the money to income ratio and the portion of additional money that can be used to finance public spending.¹

Thus -

$$S_m = D_m \times M/Y \times M_r/M$$

where S_m represents monetary savings, D_m represents the growth in demand for money, M/Y is the money to income ratio, and M_r/M (the

¹Harry G. Johnson, "Is Inflation a Retarding Factor in Economic Growth," Fiscal and Monetary Problems in Developing States, ed. David Krivine (New York: Frederick A. Praeger, 1967), pp. 126-7.

ratio of commercial bank reserves and currency in the hands of the public to total money supply) is the proportion of the increase in the money supply which can be captured for public spending.

In the Sudan, the average annual increase in the money supply was 11.3 per cent between 1960 and 1966.¹ Since the cost of living index rose 19 per cent over the same period, the actual increase in the demand for money may have been somewhat less. At any rate 11.3 per cent probably represents a generous estimate of the increase in demand for money. For the same period the ratio of reserve money to money averaged 40.1 per cent and from 1960-65 the money to income ratio averaged 13.2 per cent. Substituting these numbers into the formula it appears that the Bank of Sudan could finance investment expenditures equal to 0.6 per cent of G.N.P. with non-inflationary increases in the money supply.

In addition, some further spending could be financed through inflation, which in effect taxes holders of money balances. The marginal yield of such a tax, T_i , at low rates of inflation where the money to income ratio might be assumed to remain constant, would equal the product of the rate of inflation I ; the money to income ratio M/Y ; and the proportion of the increase in the money supply which could be captured for

¹All figures in this paragraph derived from International Monetary Fund, International Financial Statistics, XXI No. 1 (January, 1968), pp. 280- 81.

development spending Mr/M . Thus:

$$Ti = I \times M/Y \times Mr/M$$

If M/Y and Mr/M were 13.2 per cent and 40.1 per cent respectively, the yield of the inflationary tax would be just over 0.5 per cent for a 10 per cent rate of inflation. Adding Sm and Ti , it appears that the Bank of Sudan could finance investment spending equal to 1.1 per cent of national income if it permitted a 10 per cent rate of inflation and if the income velocity of money remained unchanged. Once the latter assumption is dropped, as it must be for rates of inflation over 10 per cent, the marginal yield of the inflationary tax drops sharply as the rate of inflation rises. Mundell estimates that the maximum amount of development spending which can be financed by the central bank approaches 3 per cent of national income as the rate of inflation approaches infinity.¹

This inflationary tax model assumes that inflation proceeds at a steady and well anticipated rate, that all prices throughout the economy adjust freely to the inflation and that the exchange rate is allowed to fluctuate. If any of these conditions does not exist, growth will be inhibited by a misallocation of investment resources and a diversion of the energies of private entrepreneurs into speculation on the rate of inflation. Once the situation has degenerated to that point the authorities

¹Robert A. Mundell, "Growth, Stability, and Inflationary Finance," The Journal of Political Economy, LXXIII (April, 1965), 97-109.

have to decide between two equally unpleasant courses of action: (1) to continue indefinitely with a rate of growth slower than the maximum which could be achieved; or (2) drastically slow or even stop all growth with deflationary policies in order to achieve maximum growth rates at a later date.

In summary, the Bank of Sudan can offer only marginal assistance in speeding the growth of the Sudanese economy in the short run. On the positive side, the switch from a currency board to a central bank has made it possible to mobilize for investment purposes savings held in the form of currency. This may have increased investment by up to 0.6 per cent of G.N.P. There has as yet been no indication that the commercial banks are more willing to tie up a larger proportion of their funds in medium and long-term loans for investment, even though the existence of a central bank to act as lender of last resort should make this possible. It is not, however, unreasonable to expect such a development and this may increase productive investment by up to 0.7 per cent of G.N.P.¹ On the other hand, it is extremely unlikely that any efforts by the Bank of Sudan to increase either the rate of saving or the flow of savings into financial assets will show tangible results in the short-term. If such efforts can have any effect, it can only be over a long period of time.

¹ Assuming that the ratio of bank deposits to G.N.P. does not fall below the 1965 level of 7.2 per cent, that the ratio of long-term loans to deposits rises by 10 per cent, and that a rise in the latter ratio does not result in an offsetting drop in other loans for productive investment.

CHAPTER VI

CONCLUSION

There is no doubt that the financial system of the Sudan is adequate for the needs of the country. At least one commercial bank has a long, almost venerable, record of operation in the country. During fifty years of operation it has undoubtedly trained staff and established methods of operation which have greatly contributed to the over-all growth of the banking system and the economy. Of the more recently established commercial banks at least two are wholly or partially owned by Sudanese. Thus it cannot be claimed that the banking system is completely dominated by expatriate banks whose methods of operation are based on conditions in more developed countries and do not take account of the conditions in, and needs of, the Sudan. With the establishment of the two specialized institutions, this has become even more true.

Yet conditions in the Sudan, and especially specific credit needs, have changed over the last ten years and these changes have not been reflected in the lending practices of the banks. The agricultural and industrial sectors of the economy have grown rapidly in recent years but the proportion of total credit flowing to these sectors has declined. The reason seems to be that although there has been a change in the structure of

demand for credit, the activities of the Agricultural and Industrial Banks have prevented this shift from being reflected in the market. This would be the case if the commercial banks considered the rates charged by the two specialized banks as ceiling rates for those types of loans. The banks might fear that if they attempted to charge more they would be accused of profiteering and would be subjected to some type of reprisal by the Government or the Bank of Sudan. Yet they cannot make long-term loans at the same rates as the development banks because these are, in effect, subsidized rates. The Government of the Sudan may have decided that capital investment in agriculture and industry should be subsidized; if that is the case it is unfortunate that they chose to subsidize the use of borrowed funds rather than the use of the entrepreneurs' own funds. Until long-term rates reflect market forces the participation of the commercial banks in capital investment will be limited.

The Bank of Sudan, although one of the newest institutions in the country's financial system, has become firmly established in just a few years. To a large extent this success was due to the financial structure which had developed prior to the establishment of the Bank, with the commercial banks borrowing from the National Bank of Egypt to finance their lending activities. Had such a system not existed, it might have taken the Bank of Sudan longer to become firmly established. Nevertheless, the Bank has shown that it does have adequate control over the monetary system of the country.

From the point of view of development, the establishment of the Bank of Sudan freed for development spending excess foreign reserves which had previously been held by the Currency Board as backing for the nation's money. Furthermore, with a central bank in operation increased saving in monetary form could be matched by increased development spending rather than by increased foreign reserves. The Bank is not, however, a widow's cruse; the amount of development spending it can finance is limited and the limits are low.

The problems of the Sudan are many and varied and are not limited to the field of economics. For the truly economic problems, monetary institutions and policies offer only a small part of the solution. Without money the economy will not grow rapidly, but even with money it may not grow rapidly. If, in the Sudan, money and financial institutions are regarded as a panacea, the resulting problems could well be worse than the original ones. If, on the other hand, sound planning is accompanied by proper fiscal policies, money and financial institutions can promote growth.

APPENDIX I

GROSS FIXED INVESTMENT 1955-56 TO 1962-63^a

Investment and Sources of Finance	Year Ending June 30							
	1956	1957	1958	1959	1960	1961	1962	1963 ^b
Gross fixed Invest- ment (modern type)								
Central and Local Government	6.7	8.7	14.1	13.9	14.8	15.4	26.3	37.6
Gov't. Entities separate budgets	4.7	3.9	7.2	9.0	8.1	10.6	13.8	13.5
Private	7.7	0.2	16.0	10.8	13.1	17.8	20.2	14.9
Total gross fixed investment	19.1	22.8	37.3	33.7	36.0	43.8	60.3	66.0
Sources of Finance								
Saving of central and Local Gov't.	10.7	10.5	3.9	9.9	22.7	14.8	17.8	19.6
Saving of Gov't. entities with separate budgets	12.9	- 3.9	8.1	2.4	11.3	- 2.5	4.5	16.0
Private Savings	11.3	12.2	13.7	13.9	7.7	24.5	13.5	20.0
External Source	-15.8	+ 4.0	+11.6	- 2.5	- 5.7	+ 7.0	+24.5	+10.4
Total Sources	19.1	22.8	37.3	33.7	36.0	43.8	60.3	66.0

^aSource: Sudan, Economic Survey 1963.

^bPreliminary.

APPENDIX II

GOVERNMENT REVENUE ACCORDING TO SOURCE ^a

Source	1961-62		1962-63	
	£S. millions	Per Cent	£S. millions	Per Cent
Direct Taxation	1.75	3.1	1.25	2.1
Import Consumption and Excise Duties	20.42	35.8	23.15	37.9
Export Duties and Royalties	4.27	7.5	5.63	9.2
Sugar Monopoly	7.80	13.7	-	-
Fees and Charges for Goods and Services	7.53	13.2	8.64	14.2
Participation in Agricultural Enterprises	6.47	11.4	11.13	18.2
Interest and Dividends	1.13	2.0	1.21	2.0
Other Services	2.54	4.5	2.91	4.8
Reimbursements and Inter-Departmental Transfers	5.11	9.0	7.11	11.7
Total	57.02	100	61.03	100

^aSource: United Nations, Economic and Social Council, Report on the World Social Situation: Planning for Balanced Social and Economic Growth in the Sudan. E/CN.5/346/Add.11, 7 January, 1964.

APPENDIX III

LOANS GRANTED BY THE AGRICULTURAL BANK OF SUDAN FOR THE SEASONS 1959-60 to 1964-65^a

Season	Loans Granted - - £S. millions				
	Cotton Schemes	Other Agricultural Loans			Total Loans
		Short Term	Medium Term	Long Term	
1959-60	5.938	0.435	0.070	-	6.443
1960-61	5.152	0.825	0.099	0.011	6.087
1961-62	9.783	0.470	0.097	0.014	10.364
1962-63	9.020	0.349	0.050	0.001	9.420
1963-64	5.030	0.333	0.083	0.001	5.447
1964-65	4.460	0.325	0.086	-	4.871

^aSource: Private correspondence with the Agricultural Bank of Sudan.

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